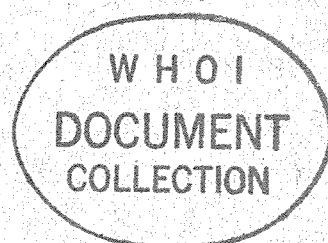
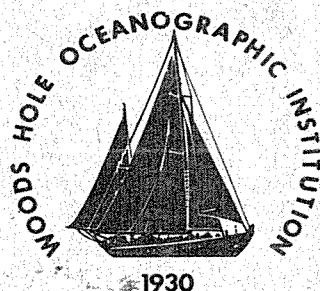


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Institution*



HYDROGRAPHIC AND NUTRIENT DATA FROM
R/V ATLANTIS II CRUISE 108, LEG 3
MARCH TO APRIL 1981 - OFF THE COAST OF PERU

by

Robert B. Gagosian, Theodore Loder,
Gale Nigrelli and James Love

January 1983

TECHNICAL REPORT

*Prepared for the National Science Foundation
under Grants OCE 77-12914, OCE 80-17877 and
OCE 81-11947.*

WOODS HOLE, MASSACHUSETTS 02543

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Approved for Distribution:

Robert B. Gagosian, Chairman
Department of Chemistry

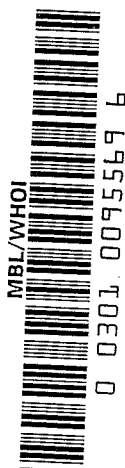


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ABSTRACT

In March and April of 1981 a major cruise was undertaken on the R/V Atlantis II off the Peruvian coast near 15°S in order to investigate the sea-air exchange of selected heavy metals and natural and anthropogenic organic compounds. The purpose of this report is to collate the hydrographic, nutrient, and plankton data generated from various investigators on this cruise and to provide a standard of reference for the cruise participants. Data for temperature, salinity, oxygen, nitrate, nitrite, ammonium, phosphate, silicate, chlorophyll a, particulate organic carbon, and particulate organic nitrogen are given. In addition, air and sea temperatures, and wind speed and direction data, collected using the SAIL system, are included.

ACKNOWLEDGEMENTS

Several people contributed to the many analyses undertaken on this cruise. Ms. Susan Perritt was especially helpful in the nutrient analyses. Mr. Tomas Lopez-Pizarro from the Instituto del Mar del Peru in Callao, Peru was very helpful on deck with the Niskin casts and deployment of the catamarans and Zodiacs. We also wish to thank the officers and crew of the R/V Atlantis II for their assistance. Special thanks to Patrick Buat-Menard who supervised the atmospheric sampling and a large amount of the small boat work, and James Fasching who supervised the catamaran experiments.

Support for this cruise was provided by the National Science Foundation Grants OCE 77-12914, OCE 80-17877 and OCE 81-11947 (to RBG) and OCE 79-09381 (to OCZ). Salary support for T. Loder was kindly provided by the College of Engineering and Physical Sciences at the University of New Hampshire. Support for the nutrient analysis computer system was provided by the University of New Hampshire's Ocean Process Analysis Laboratory (OPAL), Department of Earth Sciences, and Marine Program. Graphics presentations were implemented by Geoff Wheat with computer time provided for by the Computer Center and Department of Earth Sciences of the University of New Hampshire.

I. INTRODUCTION

During March and April, 1981 a major cruise was undertaken on the R/V Atlantis II off the Peruvian coast near 15°S. All the investigations on this cruise were part of the Sea-Air Exchange Program (SEAREX). The objectives of this program are to determine the concentrations of organic and inorganic material in the atmosphere and sea surface and to determine the fluxes of these substances across the sea-air interface. This was accomplished by a sampling plan including: 1. atmospheric samples taken from a 20-foot tower constructed at the bow of the ship; 2. surface slick material collected with (a) screens used from Zodiacs and (b) a catamaran type sampler designed to study the bubble formation and transport of material through the surface microlayer; 3. sediment samples using a small gravity corer to assess the input of sedimentary volatile organic compounds into the atmosphere in shallow water areas; 4. plankton samples using various size nets to assess the marine organism source potential of atmospheric material; and 5. water samples collected with 10 and 30 liter Niskin bottles and an all glass water sampler to assess seawater sources and sinks of atmospheric material.

In order to provide oceanographic background data in this dynamic coastal area, hydrographic and nutrient data (nitrate, nitrite, silicate, phosphate and ammonium) were collected. In addition to these, chlorophyll a and phaeopigment as well as particulate organic carbon and nitrogen measurements were made on the water samples. The SAIL (Serial ASCII Instrumentation Loop) data acquisition system, a flexible, general purpose data logging system for underway shipboard data recording, was also used on this cruise. The system was configured to emphasize meteorological and navigation information such as wind

speed and direction, air temperature and dew point, sea surface temperature, gyro compass heading and satellite navigation position, and time and date. This information was automatically recorded at 15 minute intervals throughout the cruise by a computerized data logger. Data were recorded on a DC-300 tape cartridge and later transcribed to 9 track tape for archiving and processing. The printouts are attached at the end of this report. It should be emphasized that these printouts represent the raw data only and should be used in this context.

The main hydrographic station locations (Fig. 1, Table 1) in the Peru upwelling area occupied on this cruise were chosen because of the high productivity of the area, and a great deal of work has already been done in the zone by the National Science Foundation - Coastal Upwelling Ecosystems Analyses (CUEA) program and ourselves in 1978 (Gagosian et al., 1980).

The main purpose of this report is to collate the hydrographic, nutrient, atmospheric and plankton data and use it as a standard for the cruise participants. A brief documentation of the methods is also presented. However, the reader is referred to the scientific manuscripts originating from the cruise for a critical discussion of the data.

II. METHODS

A. Temperature, Salinity, and Oxygen

Samples for hydrographic analyses were collected using Teflon-lined Nansen bottles. Temperatures were recorded with reversing thermometers and corrected according to U.S. Hydrographic Office Publication No. 607 (1956). Density and potential temperatures were calculated using a program kindly provided by Dr. Peter Brewer. Salinity samples were taken in soft glass

screw-capped bottles and analyzed on board ship using a Guildline Autosol Salinometer (Model 8400) with a stated accuracy of ± 0.003 ppt. Conductivities were converted to salinities using a program provided by George P. Knapp. Oxygen samples were run on board ship using a modified Winkler procedure (Carpenter, 1965) and calculated using a program provided by Deborah K. Shafer.

B. Nutrients

All nutrient analyses were run on board ship using a 2-channel Technicon AutoAnalyzer II with the following methods and slight modifications as described by Glibert and Loder (1977): silicate (TIS, 1973b), phosphate (TIS, 1973a), nitrate (TIS, 1972), nitrite (nitrate method with reduction column removed), and ammonium (Adamski, 1976). The AutoAnalyzer was interfaced with an Apple II-plus computer to control the sampler and collect sample peak data. Refractive index, turbidity and chemical-salt corrections were applied to the data where appropriate (Loder and Glibert, 1977) as were carryover corrections using a method described by Nelson (1980).

The water samples for nutrient analyses were refrigerated in the dark in acid-washed, sample-rinsed polyethylene bottles until analysis. Samples were analyzed unfiltered as no significant differences were found between filtered and unfiltered samples at the 95% confidence level (Gagosian et al., 1980). No mercuric chloride was added as a preservative because it was found to significantly affect phosphate concentrations (Gagosian et al., 1980). Because of the labile nature of ammonium and phosphate, analyses for these nutrients were run within an hour or less of collection for all Nansen casts and water column profiles. These analyses for other samples were generally run on the same day of collection unless otherwise noted on the data sheets. The remain-

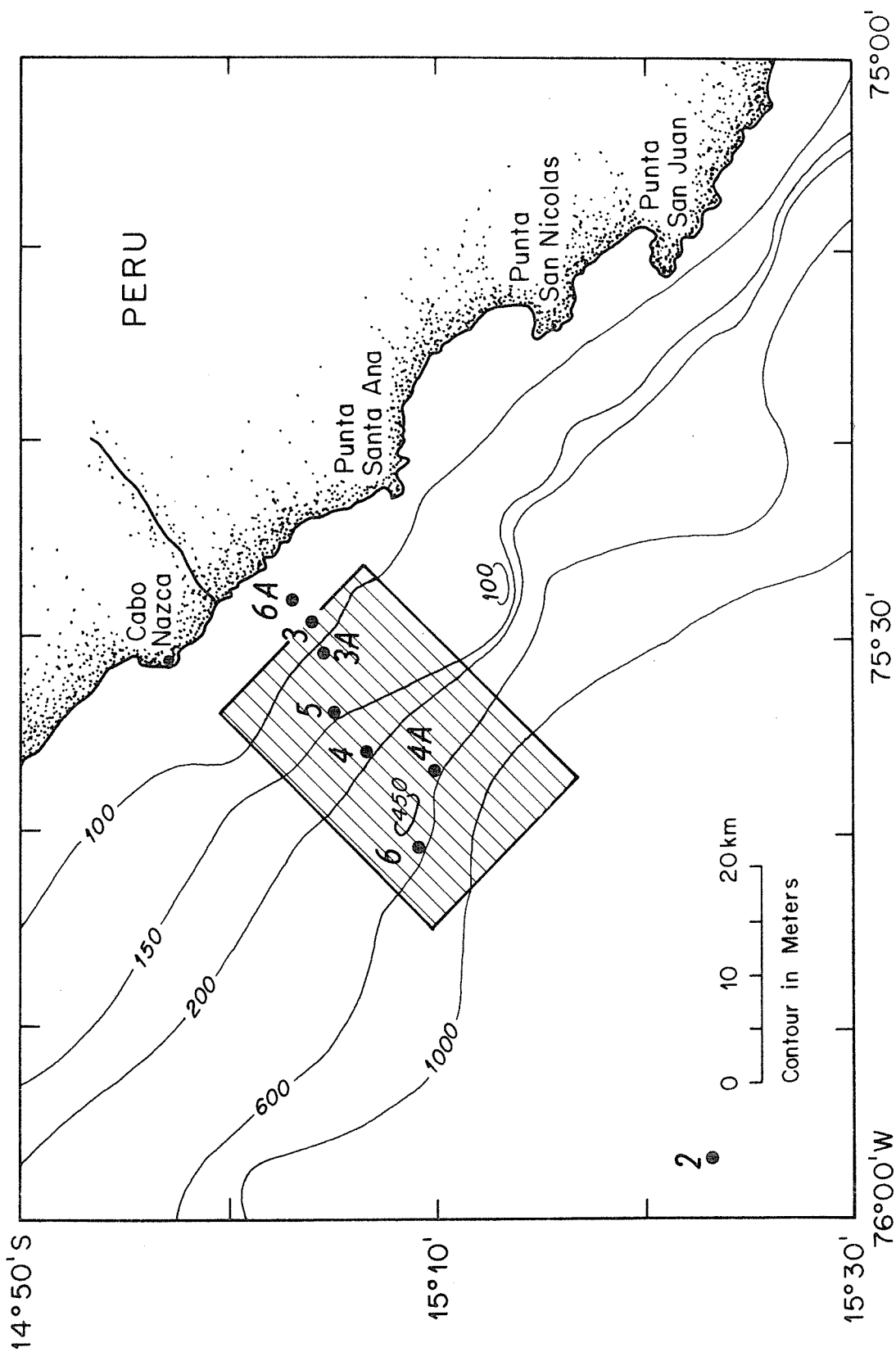


Figure 1. Locations of main sampling stations made during R/V Atlantis II Cruise 108-3 -- March-April, 1981. Outlined rectangle indicates area of surface survey (March 19-20, 1981).

Table 1.

Main Water Sampling Station Locations for A-II-108-3

Station No.	S	Location	W	Depth (m)
1	7°14'		80°48'	240
2	15°23'		75°57'	4100
3	15°04'		75°29'	75
3a (OCZ-NO)	15°03' - 15°06'		75°30' - 75°32'	105-128
4	15°07'		75°36'	190
4a (C)	15°10'		75°37'	400
5	15°05'		75°34'	135
6	15°09'		75°41'	390
6a	15°03'		75°28'	80

Table 2.

Personnel participating in R/V Atlantis Cruise 108, Leg 3 -- March 9 to April 8, 1981 -- Balboa, Panama to Callao, Peru.

	Name	Title	Affiliation
1.	Dr. Robert B. Gagosian	Chief Scientist/Associate Scientist	Woods Hole Oceanographic Institution
2.	Dr. Oliver C. Zafiriou	Associate Scientist	Woods Hole Oceanographic Institution
3.	Ms. Gale E. Nigrelli	Research Associate	Woods Hole Oceanographic Institution
4.	Mr. Daniel Repeta	Graduate Student	Woods Hole Oceanographic Institution
5.	Ms. Deborah Maloof	Laboratory Assistant	Woods Hole Oceanographic Institution
6.	Dr. Philip M. Gschwend	Postdoctoral Investigator	Massachusetts Institute of Technology
7.	Dr. Theodore Loder	Associate Professor	University of New Hampshire
8.	Ms. Susan Perritt	Research Assistant	Marine Biological Laboratory
9.	Dr. James Fasching	Professor of Chemistry	University of Rhode Island
10.	Mr. David Stout	Graduate Student	University of Rhode Island
11.	Mr. Hal Maring	Graduate Student	University of Rhode Island
12.	Mr. Roy Heaton	Graduate Student	University of Rhode Island
13.	Mr. Eric Butler	Graduate Student	University of Rhode Island
14.	Mr. Warren Boothman	Graduate Student	University of Rhode Island
15.	Mr. Thomas Fogg	Graduate Student	University of Rhode Island
16.	Mr. Kevin Sullivan	Research Assistant	Texas A & M University
17.	Dr. Susan Turner	Postdoctoral Investigator	University of East Anglia, England
18.	Mr. Richard Hunter-Smith	Graduate Student	University of East Anglia, England
19.	Mr. Gary Gill	Graduate Student	University of Connecticut
20.	Dr. Patrick Buat-Menard	Attache de Recherche	Centre des Faibles Radioactivities (France)
21.	Mr. Tomas Lopez Pizarro		IMARPE, Peru
22.	Mr. Bruce Garifales	Electronics Technician	Woods Hole Oceanographic Institution
23.	Ms. Cindy Pilskaln	Graduate Student	Harvard University

ing nutrients were run within 24 hours of collection unless otherwise noted. The majority of samples (> 95%) were run in duplicate and average data are reported, as are the average standard deviations for replicate analyses on the same sample. In general, these are very low (Table 3) and consequently minor variations of a nutrient concentration in a given profile of even a few hundredths of a micro-mole/liter are real. However, the reproducibility of analysis from day to day can be 2 to 5 times as high (Table 3) because of minor variations in all of the following: standards, reagents, nitrate column reduction efficiencies, storage effects, refractive index and turbidity corrections, chemical-salt corrections and carryover corrections.

C. Chlorophyll a and Phaeopigments

Chlorophyll a and phaeopigments were determined by the fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen et al., 1965) using a Turner Designs Model 10-005 R fluorometer.

Table 3.

Average Standard Deviations for Replicate Nutrient Samples Analyzed
at the Same Time (Same Run) and at Different Times
(Different Runs on Different Days).

Nutrient	Approximate Range of Sample Concentration (μ -moles/liter)	Average Standard Deviation ($\pm \mu$ -moles/liter)	
		Same Run ¹	Different Runs ²
Phosphate	0-3.5	0.04	0.03
Ammonium	0-4	0.02	0.11
Nitrate	0-12	0.04	--
	0-40	0.09	0.33
Nitrite	0-8	0.02	0.05
Silicate	0-45	0.06	0.1
	0-150	0.3	--

¹Based on average standard deviations of 3-4 standards for 7 to 21 runs except for silicate (0-150) which was only one run.

²Based on average standard deviations of 5 or 6 replicate samples stored refrigerated in dark, and analyzed 2 to 3 times over a 2-4 day period.

II. PRESENTATION FORMAT

Tabular and graphic presentation of the data have been organized on a station-by-station basis (Fig. 1) and in the case of tabular data, by cast type within each station. Nansen cast values for potential temperature, sigma-t, salinity, dissolved oxygen and inorganic nutrients including total nitrogen nutrients (nitrate + nitrite + ammonium) have been plotted as profiles.

Parametric units and graphic labelling notation used throughout this report are summarized in Table 4. Figure numbers have been keyed to both station number and cast type. For example: Figure 2-1 identifies this figure as a plot of Nansen data from Station 1, the second figure in the report.

Tabular data for the Nansen casts are presented first, followed by combined data from Niskin, Bodman and NIO water samplers.

An extensive surface survey was conducted on March 19-20, 1981. The following parameters were measured: temperature, salinity, chlorophyll a, and nutrients (Table 5, 6). These data are presented as pairs of figures for each parameter following Fig. 34, which represents the sampling stations. The first figure for each parameter is a contour plot; the second is a 3-dimensional representation of the parameter in question over the survey area. Although data for 73 stations are given in Table 5, only stations 1-55 were plotted on the contour plots. This was done because stations 56-73 were sampled after daybreak and showed significant changes relative to the preceding night. The orientation of the contour plots for salinity, temperature, and depth are at a different angle than the rest, since high values farther from the coast obscured those nearer the shore. Although no scales are shown, maximum values are given in each figure caption for reference. Following the surface survey plots are the tabulated navigational and meteorological data collected by using the SAIL system.

TABLE 4

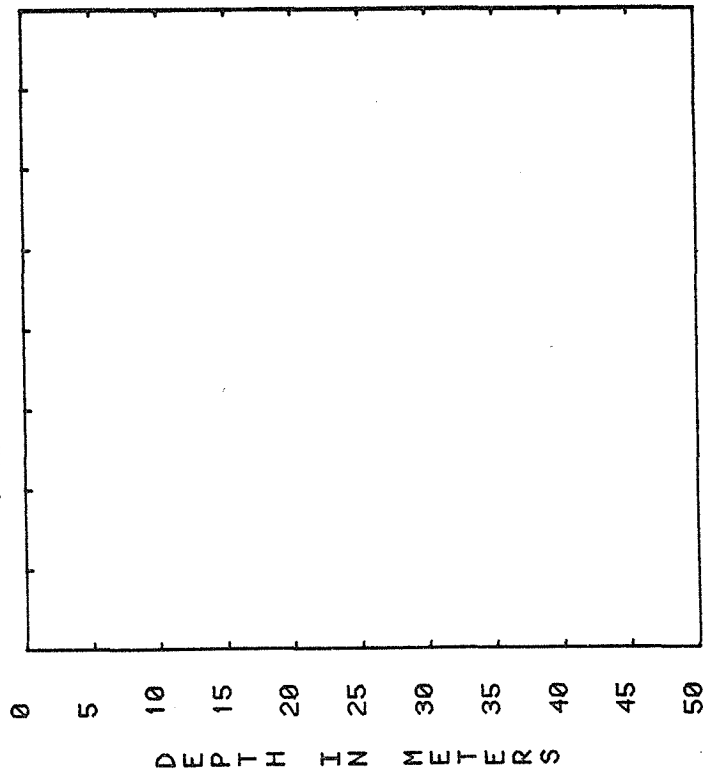
A-II (108-3): CAST #, STAT # (CAST TYPE)
 DATE MESSENGER TIME

=====

PARAC(3) "CIRCLES"

PARAC(2) "DIAMONDS"

PARAC(1) "TRIANGLES"



PARAMETRIC UNITS USED IN FIGURES:

DATE	PERU LOCAL DATE
TIME	PERU LOCAL TIME @ MESSENGER DROP EXPRESSED IN HOURS
DEPTH	In METERS
TEMPERATURE	In DEGREES CELCIUS
SALINITY	In PARTS/THOUSAND
OXYGEN	In mLITERS/LITER
NUTRIENTS	In μ MOLES/LITER
CHLOROPHYLL	In μ GRAMS/LITER
PHAEOPIGMENTS	"

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FIGURES OF DISSOLVED OXYGEN, POTENTIAL TEMPERATURE, SALINITY, SIGMA T,
SILICATE, TOTAL INORGANIC NITROGEN, NITRATE, NITRITE, AMMONIUM, PHOSPHATE,
CHLOROPHYLL A and PHAEOPIGMENT FOR NANSEN CASTS FOR

STATIONS 1-6 (TABLE 1).

ATLANTIS II (108-3): 1; #1 (NANSEN)
3/13/81 0830

SIGMA-t

24 24.5 25 25.5 26 26.5 27 27.5 28

POTENTIAL TEMPERATURE (C)

0 3 6 9 12 15 18 21 24

SALINITY (PPT)

0 34.4 34.6 34.8 35 35.2

DEPTH in METERS

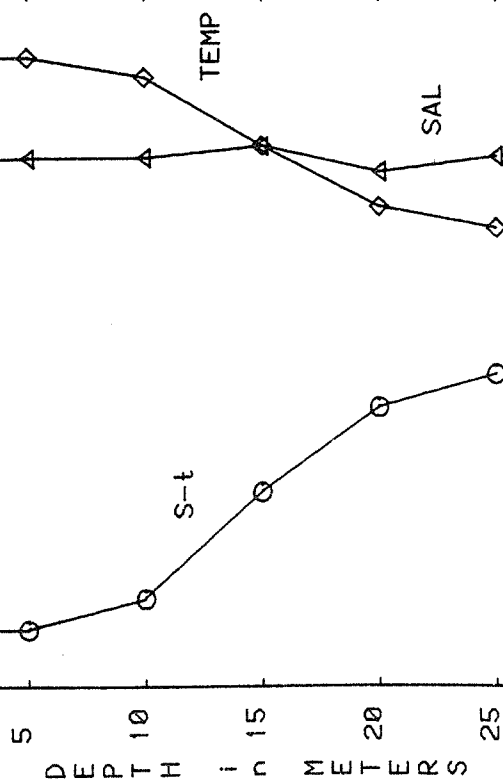


Fig. 2-1

ATLANTIS II (108-3): 1; #1 (NANSEN)
3/13/81 0830

DISSOLVED OXYGEN (mL/L)

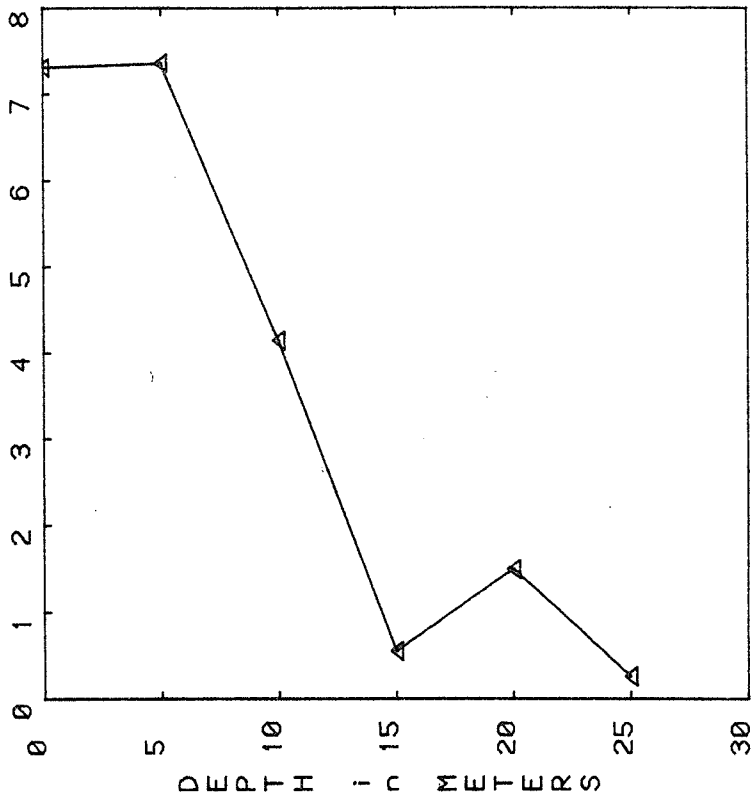


Fig. 3-1

Nansen data, Station 1.

ATLANTIS II (108-3): 1; #1 (NANSEN)
3/13/81 0830

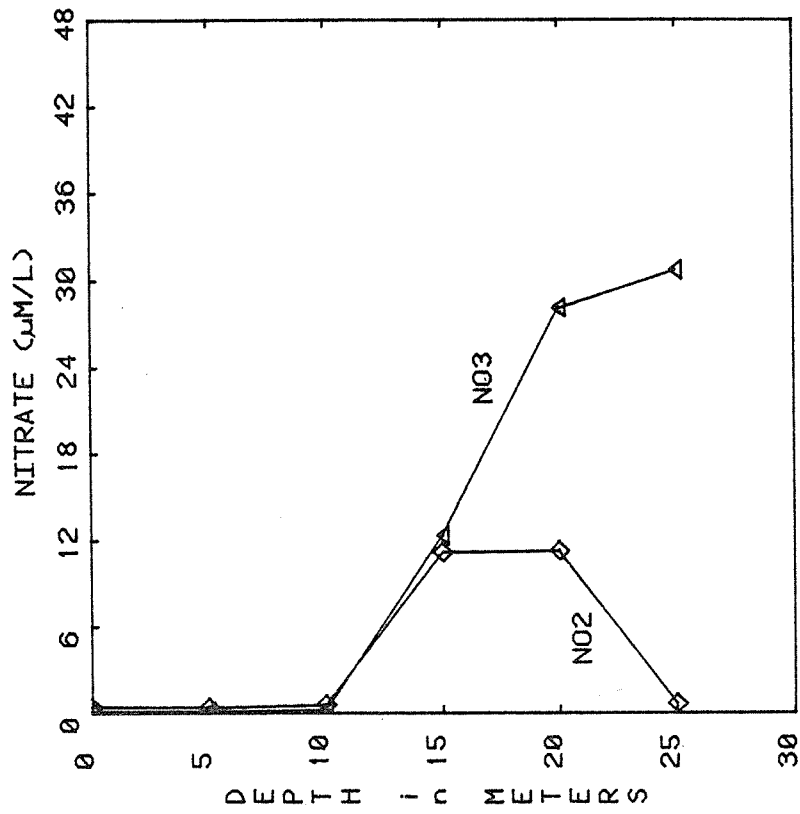
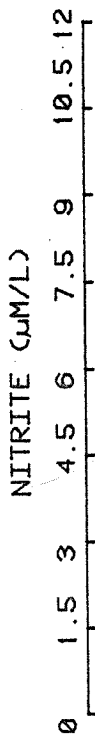


Fig. 4-1

ATLANTIS II (108-3): 1; #1 (NANSEN)
3/13/81 0830

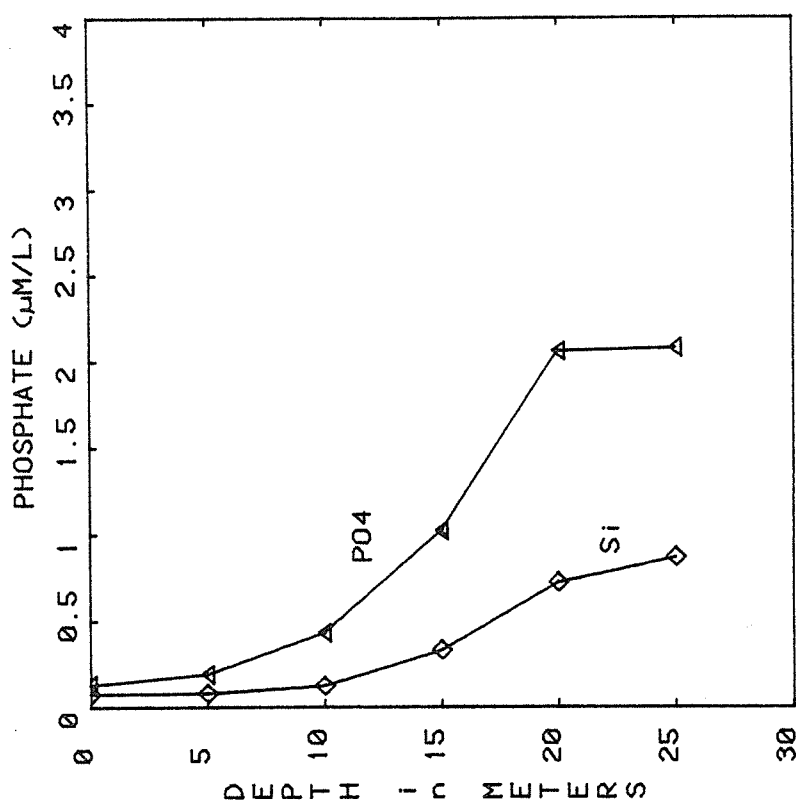
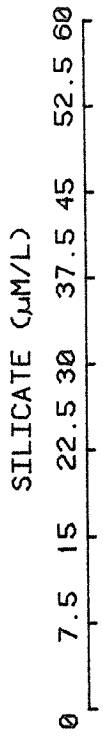


Fig. 5-1

Nansen data, Station 1.

ATLANTIS II (108-3): 6,7; #2 (NANSEN)
3/16/81 1007 : 1050

SIGMA-t

24 24.5 25 25.5 26 26.5 27 27.5 28

POTENTIAL TEMPERATURE (C)

0 3 6 9 12 15 18 21 24

SALINITY (PPT)

0 34.4 34.6 34.8 35.0 35.2

DEPTH in METERS

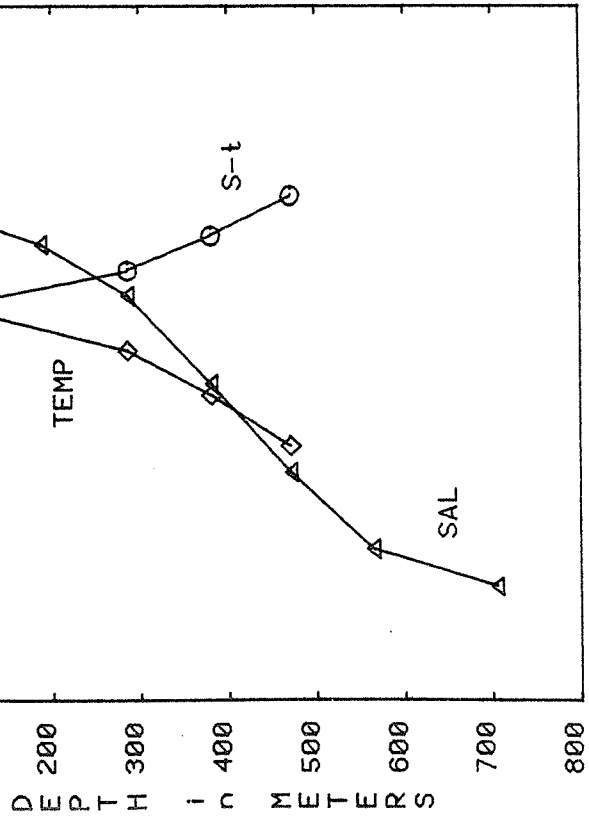


Fig. 6-2

Nansen data, Station 2.

ATLANTIS II (108-3): 6,7; #2 (NANSEN)
3/16/81 1007 : 1050

DISSOLVED OXYGEN (mL/L)

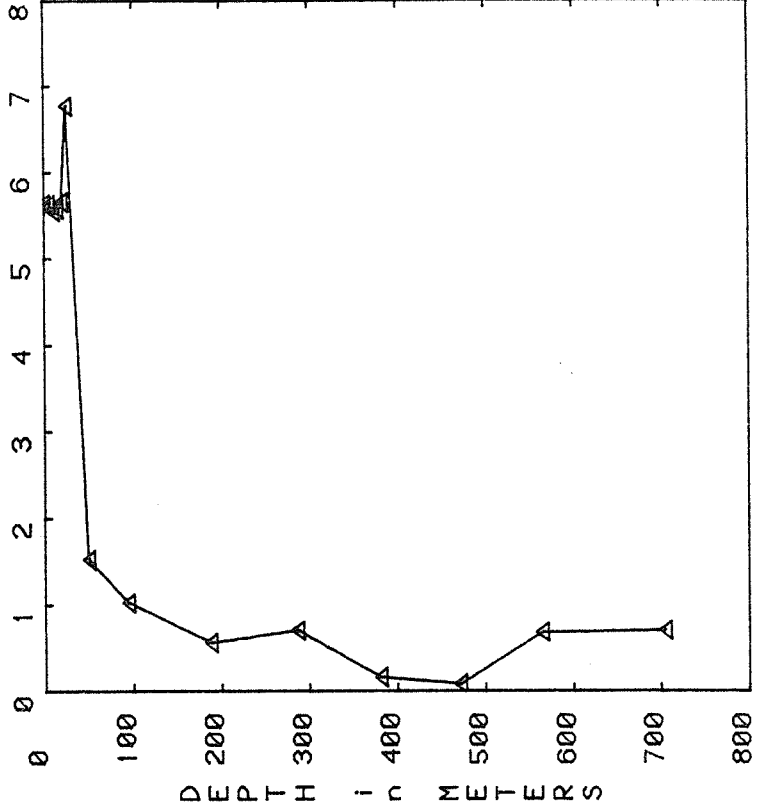


Fig. 7-2

ATLANTIS II (108-3): 6,7; #2 (NANSEN)
3/16/81 1007 : 1050

AMMONIUM $\mu\text{M/L}$

0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4

NITRITE $\mu\text{M/L}$

0 1.5 3 4.5 6 7.5 9 10.5 12

NITRATE $\mu\text{M/L}$

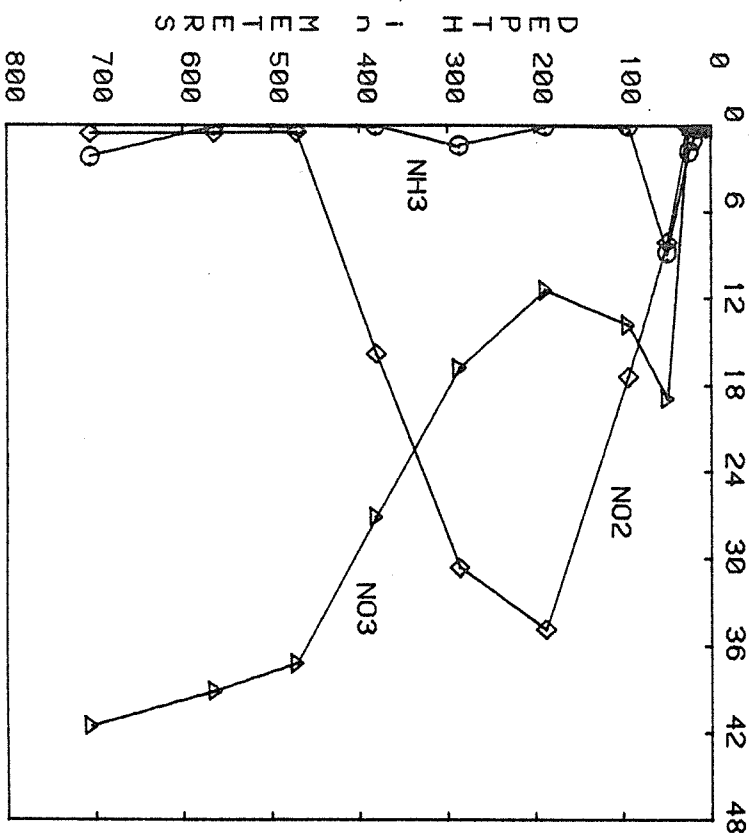


Fig. 8-2

ATLANTIS II (108-3): 6,7; #2 (NANSEN)
3/16/81 1007 : 1050

SILICATE $\mu\text{M/L}$

0 7.5 15 22.5 30 37.5 45 52.5 60

PHOSPHATE $\mu\text{M/L}$

0 0.5 1 1.5 2 2.5 3 3.5 4

TOTAL NITROGEN $\mu\text{M/L}$

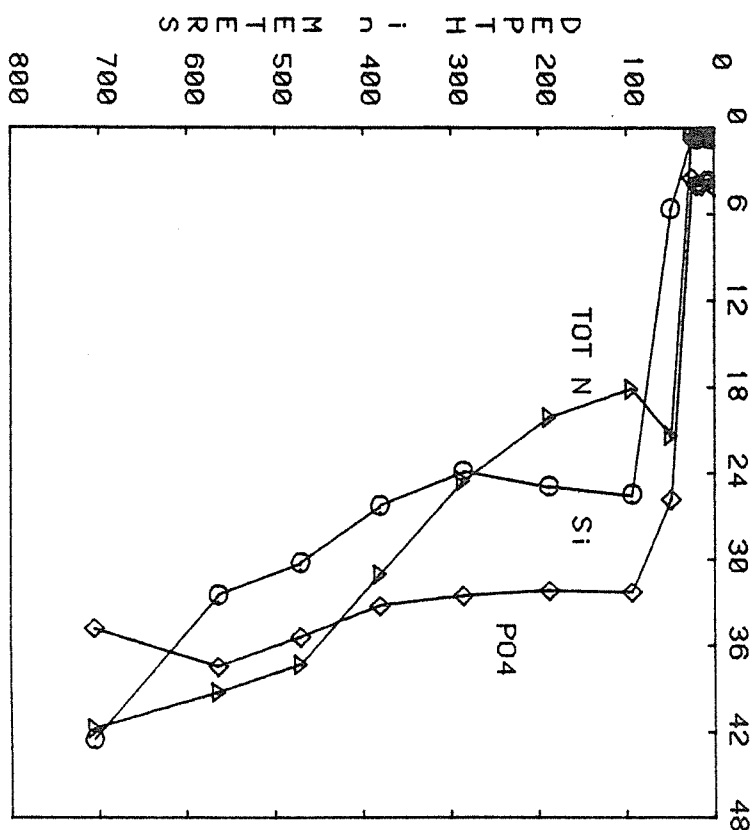
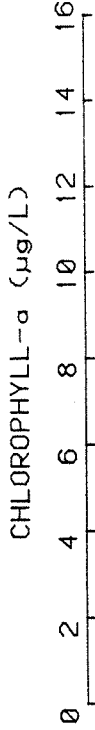


Fig. 9-2

Nansen data, Station 2.

ATLANTIS II (108-3): 68,70; #2 (NANSEN)
3/29/81 0923 : 1035



PHAEOPIGMENTS ($\mu\text{g/L}$)



DISSOLVED OXYGEN (mL/L)

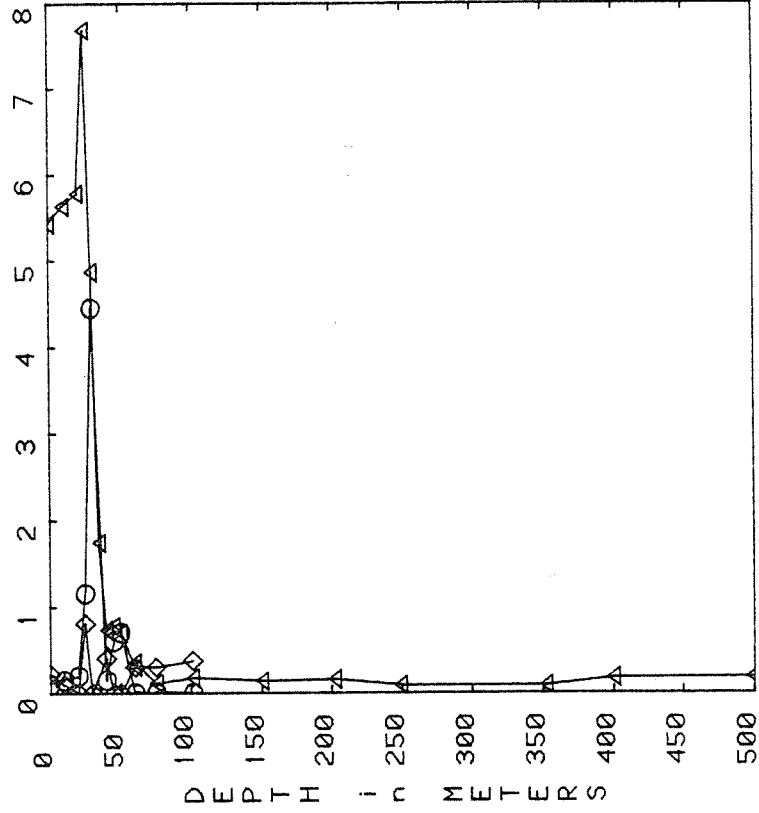
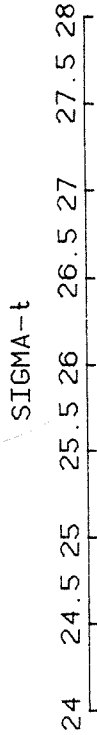
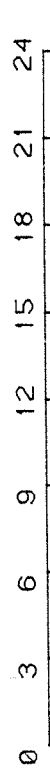


Fig. 11-2

ATLANTIS II (108-3): 68,70; #2 (NANSEN)
3/29/81 0923 : 1035



POTENTIAL TEMPERATURE ($^{\circ}\text{C}$)



SALINITY (PPT)

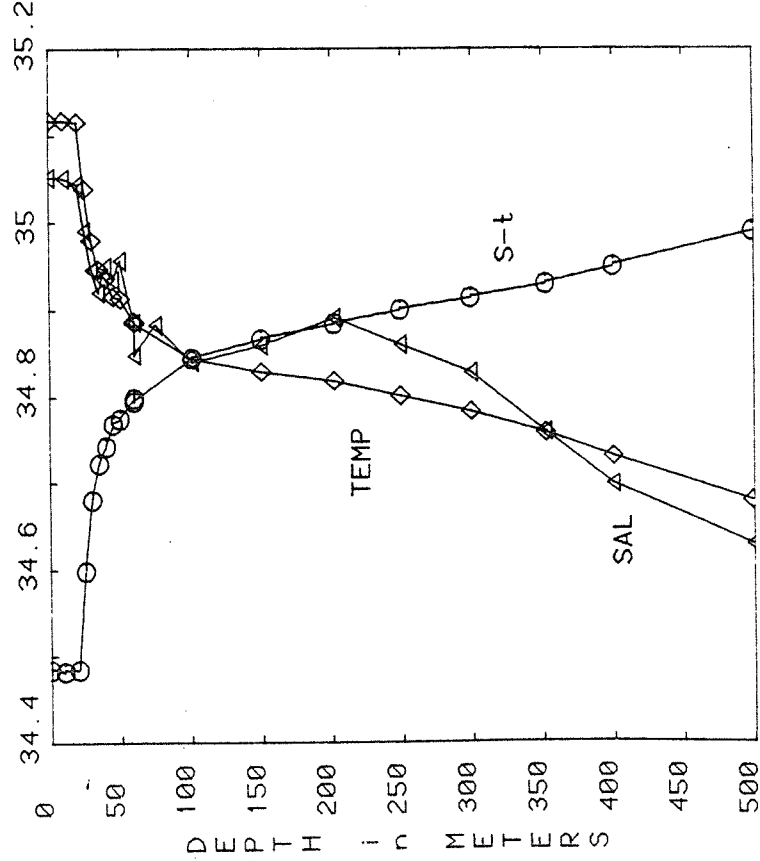


Fig. 10-2

ATLANTIS II (108-3): 68,70; #2 (NANSEN)
 3/29/81 0923 : 1035
 =====
 SILICATE $\mu\text{M/L}$
 0 7.5 15 22.5 30 37.5 45 52.5 60

PHOSPHATE $\mu\text{M/L}$
 0 0.5 1 1.5 2 2.5 3 3.5 4

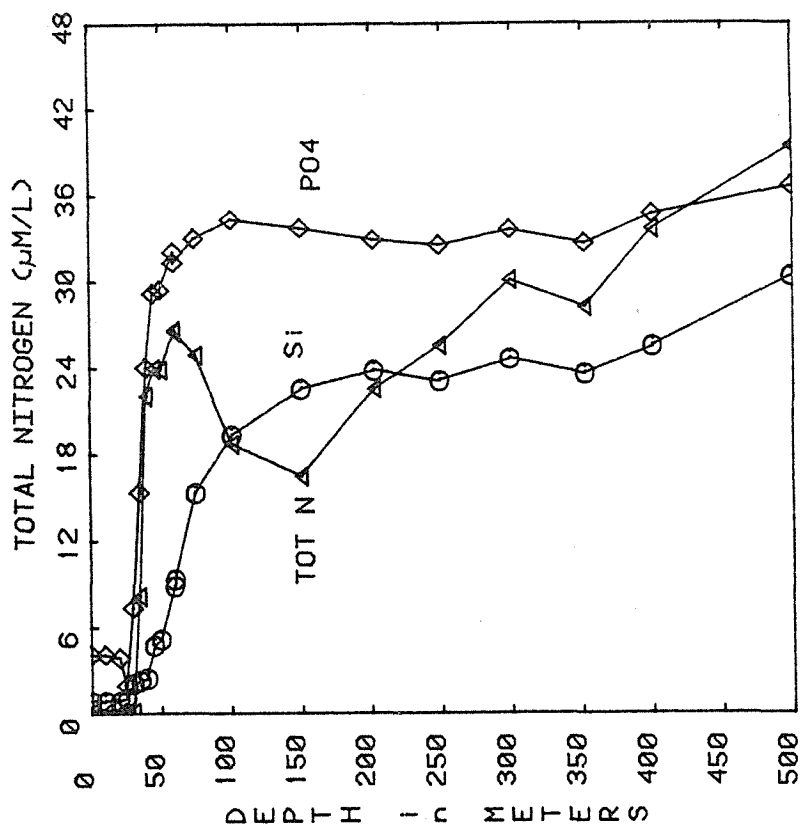


Fig. 13-2

ATLANTIS II (108-3): 68,70; #2 (NANSEN)
 3/29/81 0923 : 1035
 =====
 AMMONIUM $\mu\text{M/L}$
 0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4

NITRITE $\mu\text{M/L}$
 0 1.5 3 4.5 6 7.5 9 10.5 12

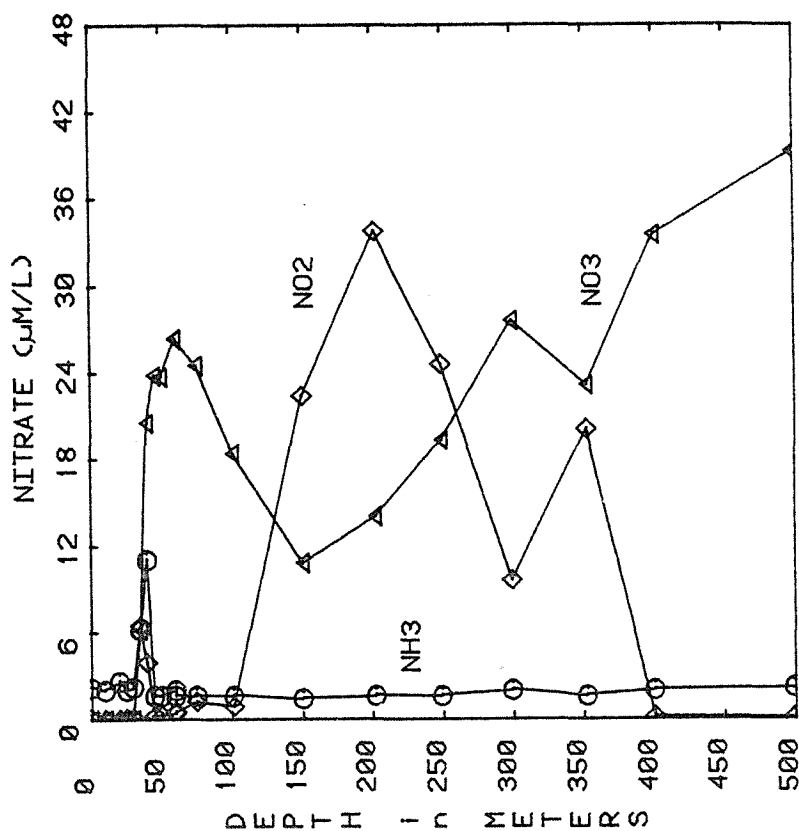
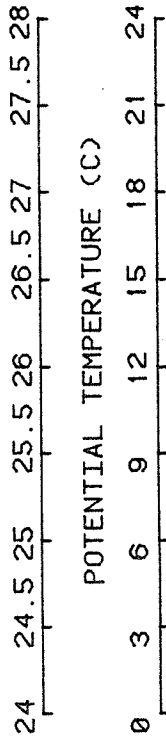


Fig. 12-2

Nansen data, Station 2.

ATLANTIS II (108-3): 17; #3 (NANSEN)
3/18/81 1605

SIGMA-t



SALINITY (PPT)

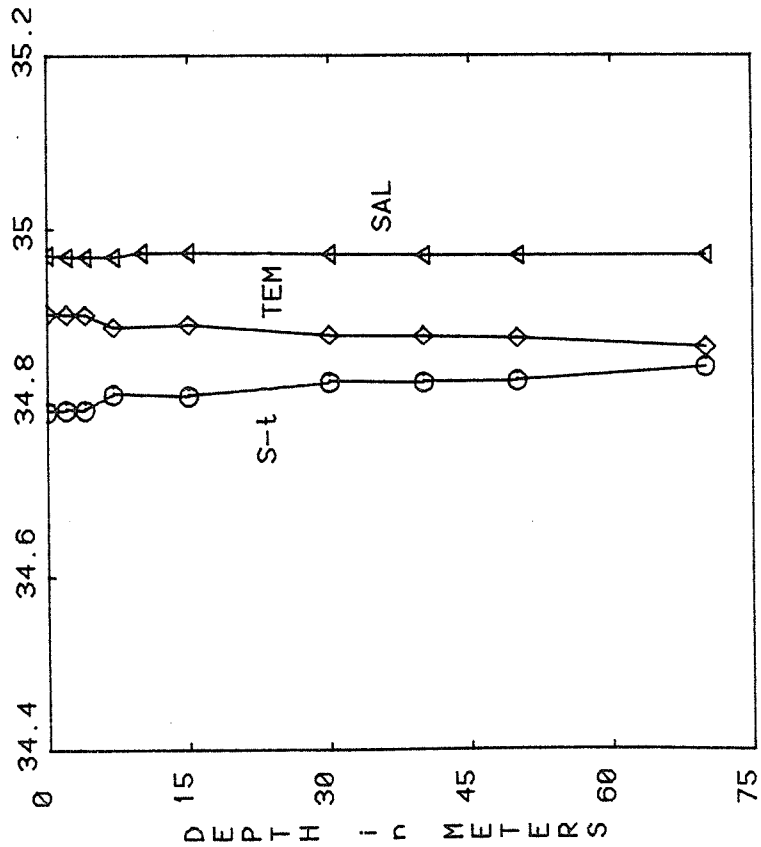
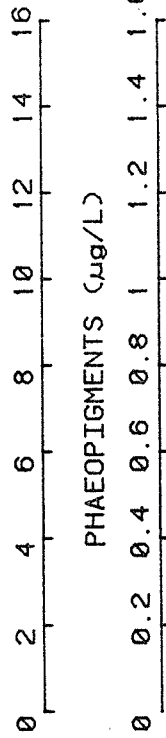


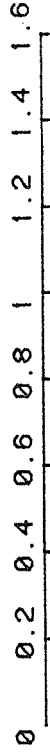
Fig. 14-3

ATLANTIS II (108-3): 17; #3 (NANSEN)
3/18/81 1605

CHLOROPHYLL-a (µg/L)



PHAEOPIGMENTS (µg/L)



DISSOLVED OXYGEN (mL/L)

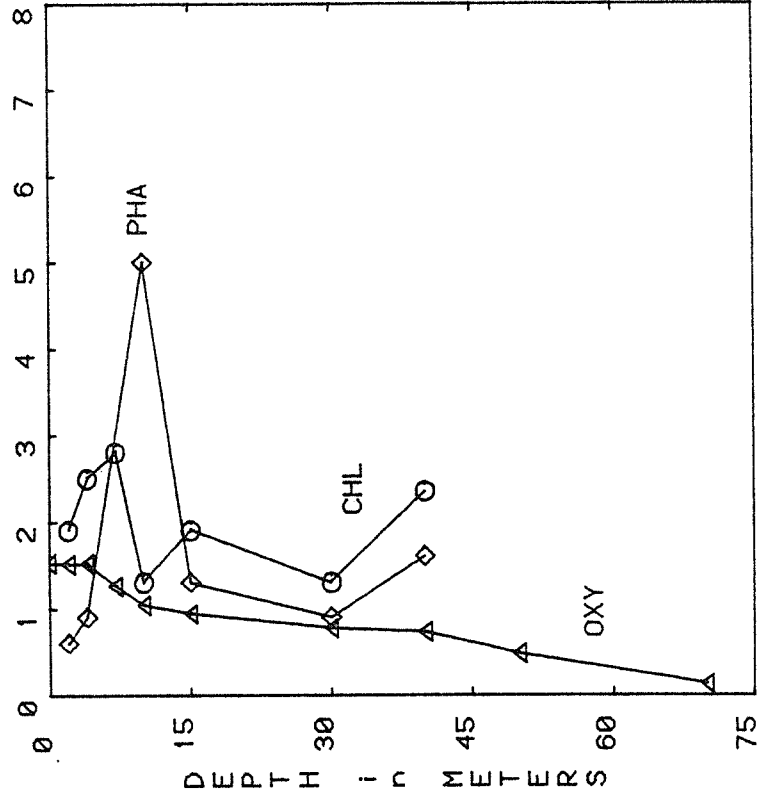
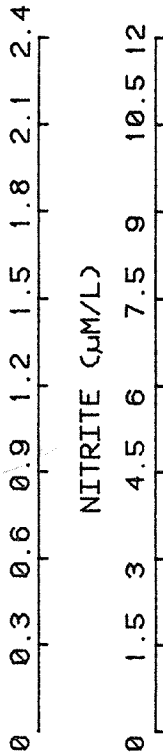


Fig. 15-3

Nansen data, Station 3.

ATLANTIS II (108-3): 17; #3 (NANSEN)
3/18/81 1605

AMMONIUM $\mu\text{M/L}$



NITRITE $\mu\text{M/L}$

NITRATE $\mu\text{M/L}$

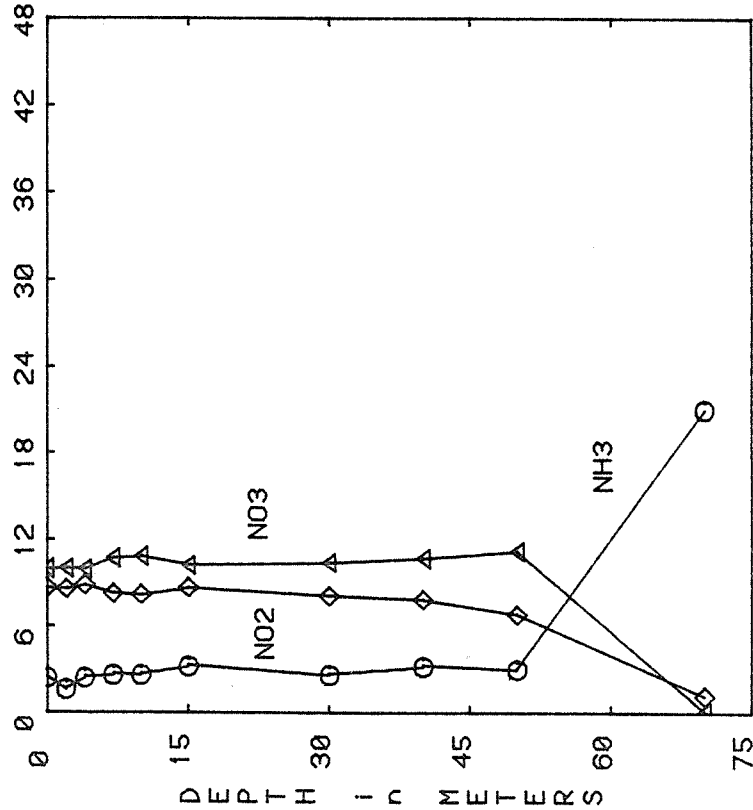
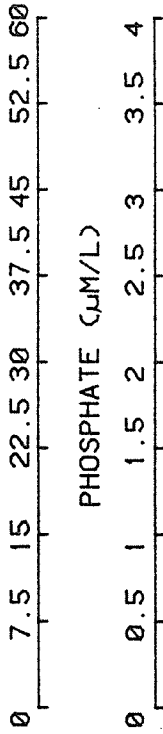


Fig. 16-3

Nansen data, Station 3.

ATLANTIS II (108-3): 17; #3 (NANSEN)
3/18/81 1605

SILICATE $\mu\text{M/L}$



PHOSPHATE $\mu\text{M/L}$

TOTAL NITROGEN $\mu\text{M/L}$

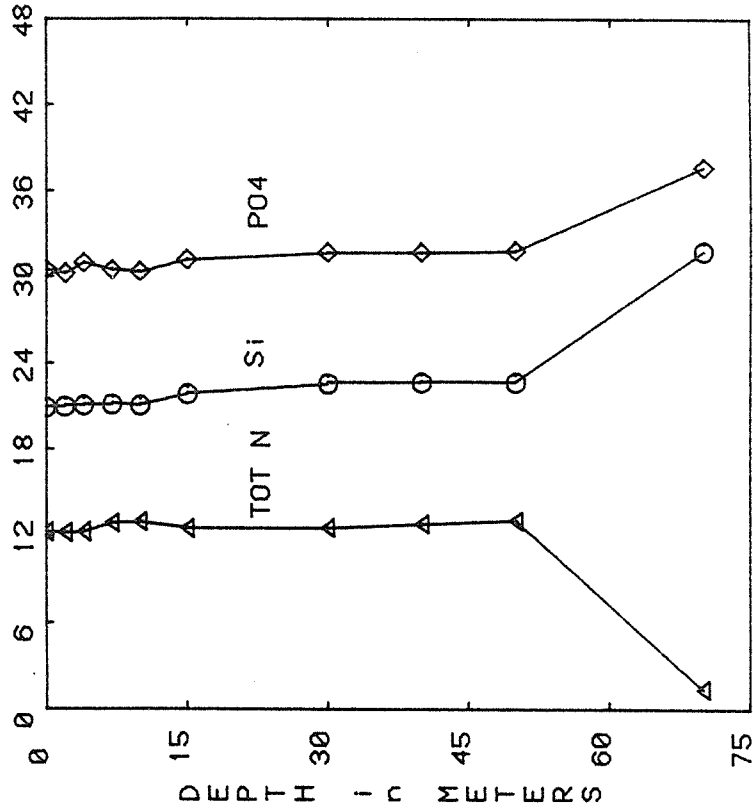


Fig. 17-3

ATLANTIS II (108-3): 34,35; #4 (NANSEN)
3/21/81 0940 : 1035

SIGMA-t

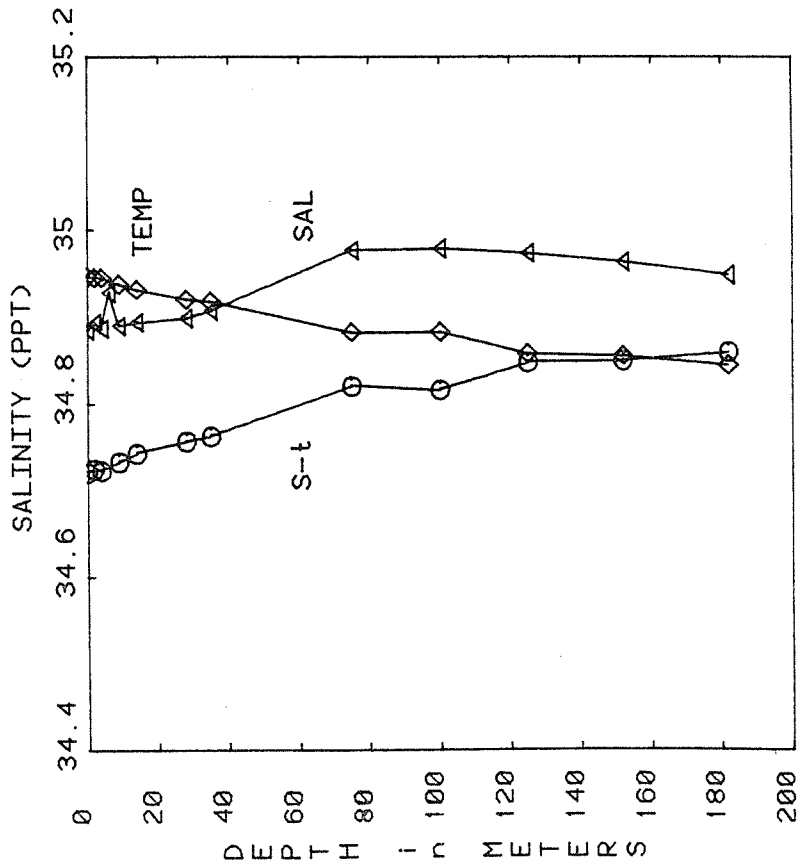
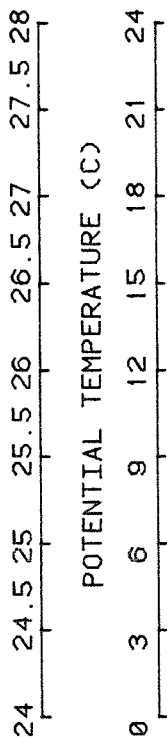


Fig. 18-4

ATLANTIS II (108-3): 34,35; #4 (NANSEN)
3/21/81 0940 : 1035

CHLOROPHYLL-a (µg/L)

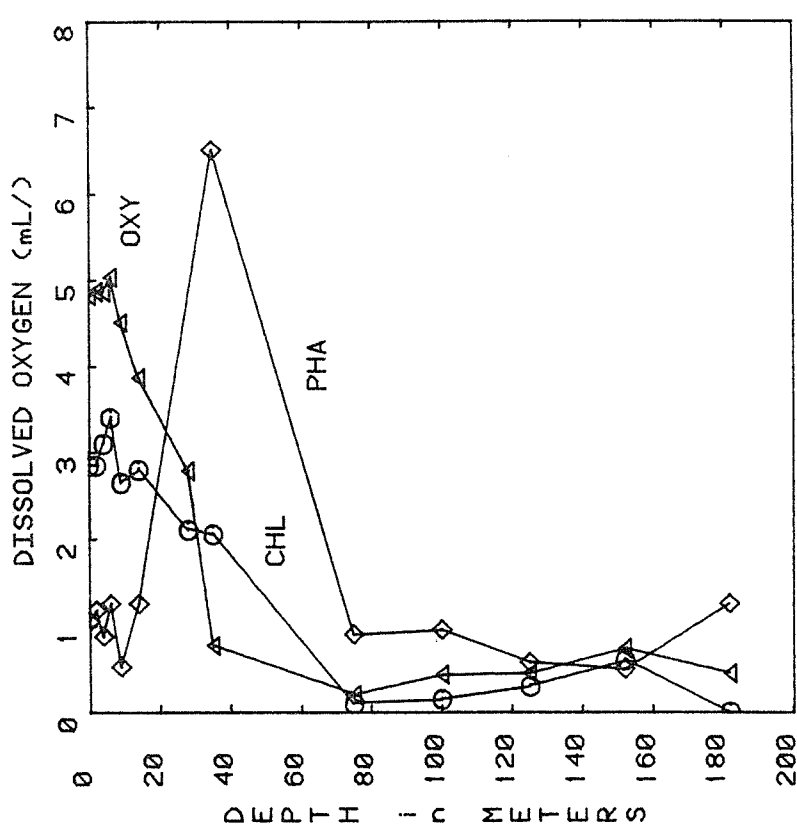
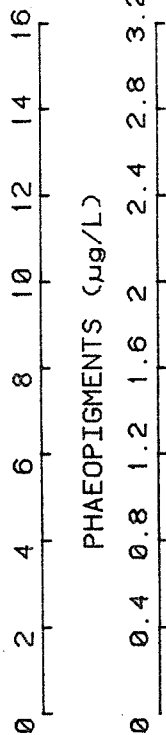


Fig. 19-4

ATLANTIS II (108-3): 34,35; #4 (NANSEN)
3/21/81 0940 : 1035

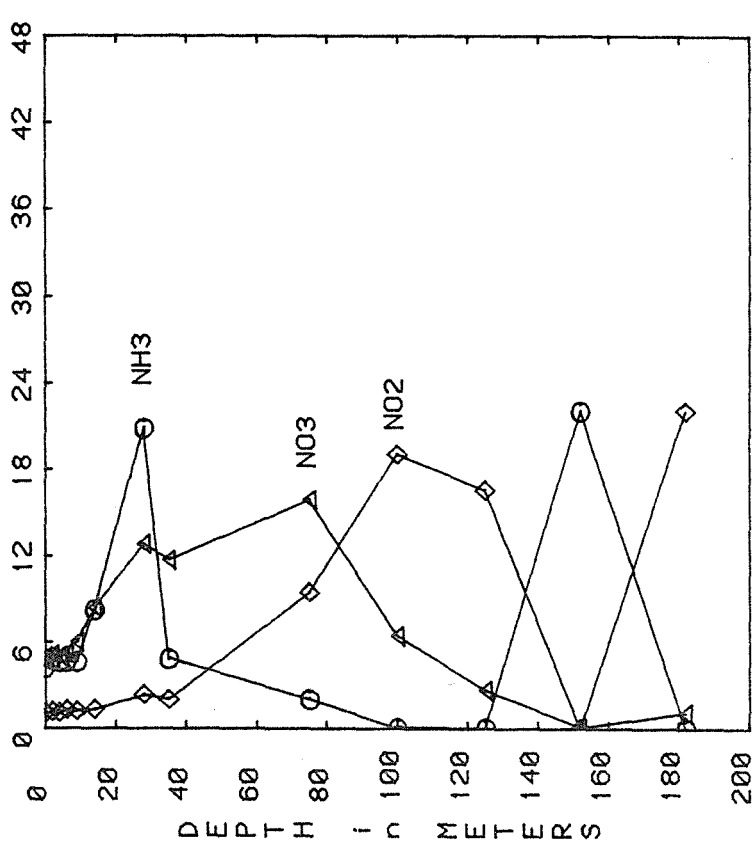
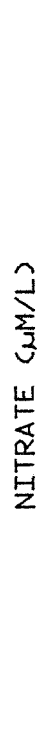
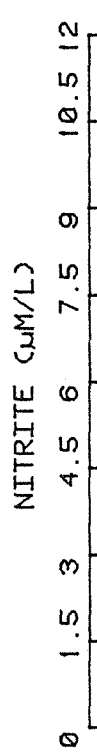
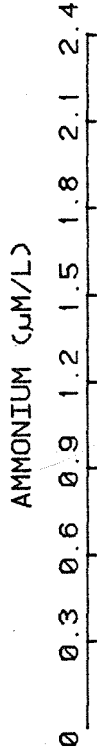


Fig. 20-4

ATLANTIS II (108-3): 34,35; #4 (NANSEN)
3/21/81 0940 : 1035

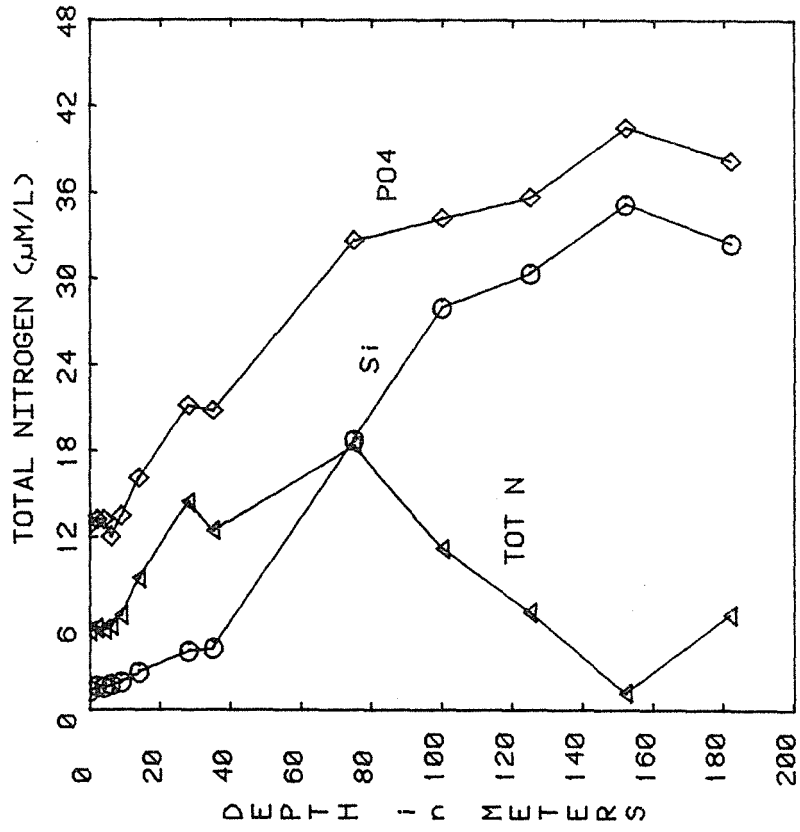
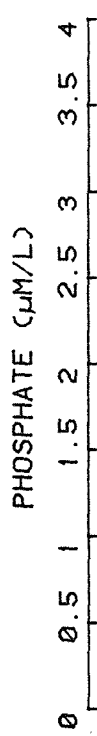
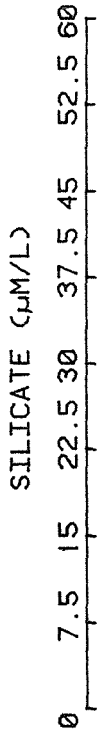


Fig. 21-4

Nansen data, Station 4.

ATLANTIS II (108-3): 43; #4 (NANSEN)
3/24/81 1252

SIGMA-t

24 24.5 25 25.5 26 26.5 27 27.5 28

POTENTIAL TEMPERATURE (C)

0 3 6 9 12 15 18 21 24

SALINITY (PPT)

0 34.4 34.6 34.8 35 35.2

DEPTH in METERS

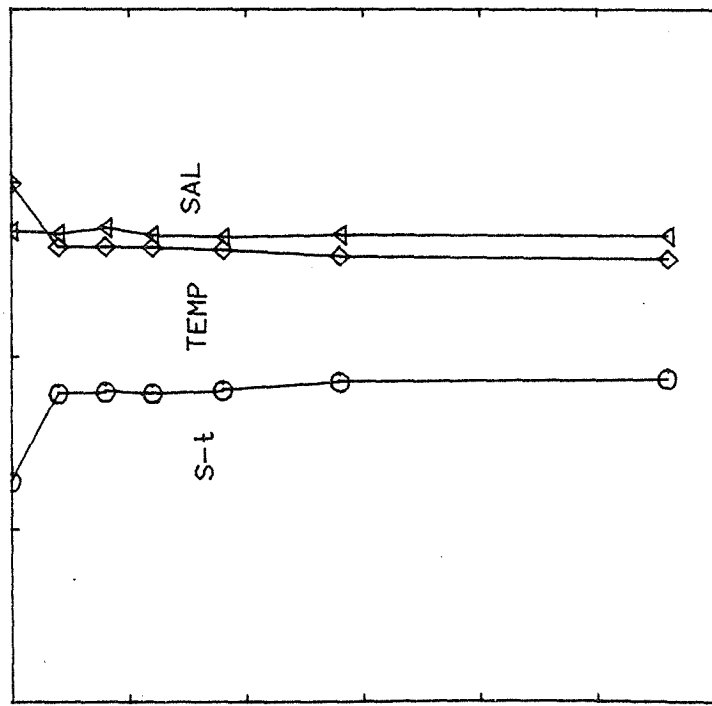


Fig. 22-4

ATLANTIS II (108-3): 43; #4 (NANSEN)
3/24/81 1252

CHLOROPHYLL-a (µg/L)

0 2 4 6 8 10 12 14 16

PHAEOPIGMENTS (µg/L)

0 0.2 0.4 0.6 0.8 1 1.2 1.4 1.6

DISSOLVED OXYGEN (mL/L)

0 1 2 3 4 5 6 7 8

DEPTH in METERS

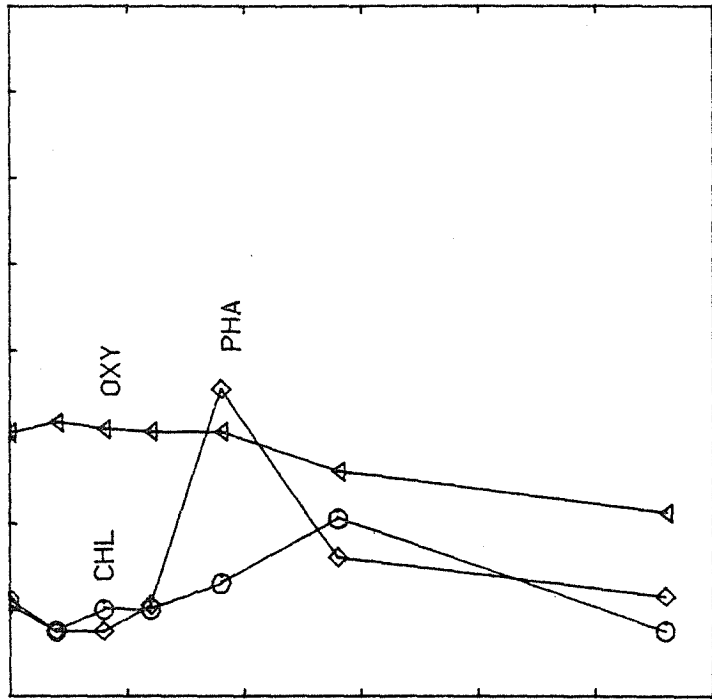


Fig. 23-4

ATLANTIS II (108-3): 43; #4 (NANSEN)
3/24/81 1252

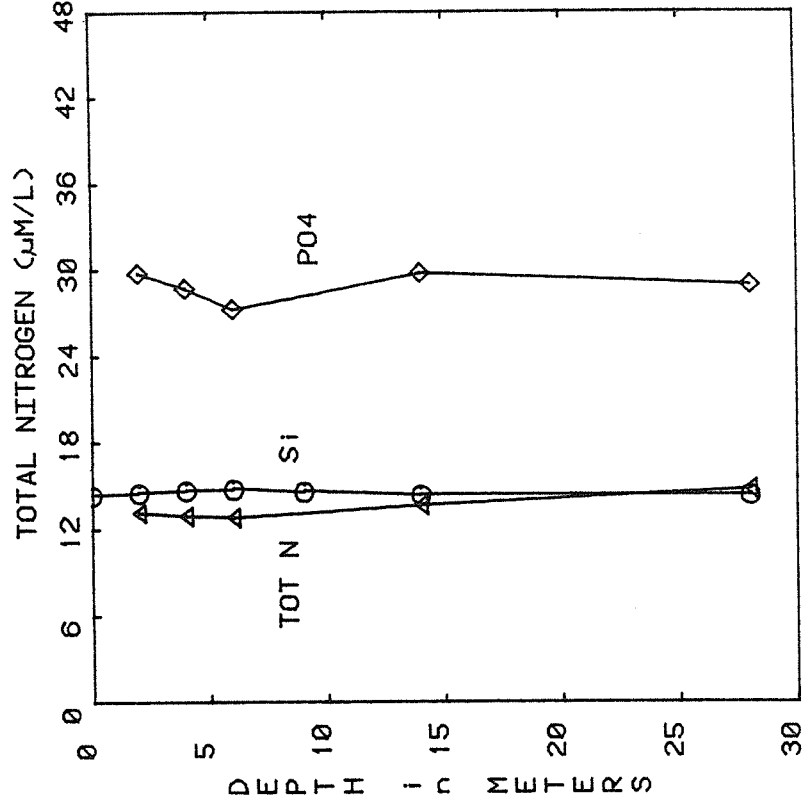
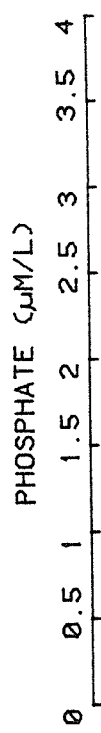
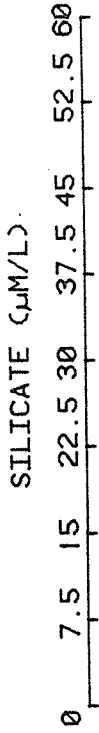


Fig. 25-4

ATLANTIS II (108-3): 43; #4 (NANSEN)
3/24/81 1252

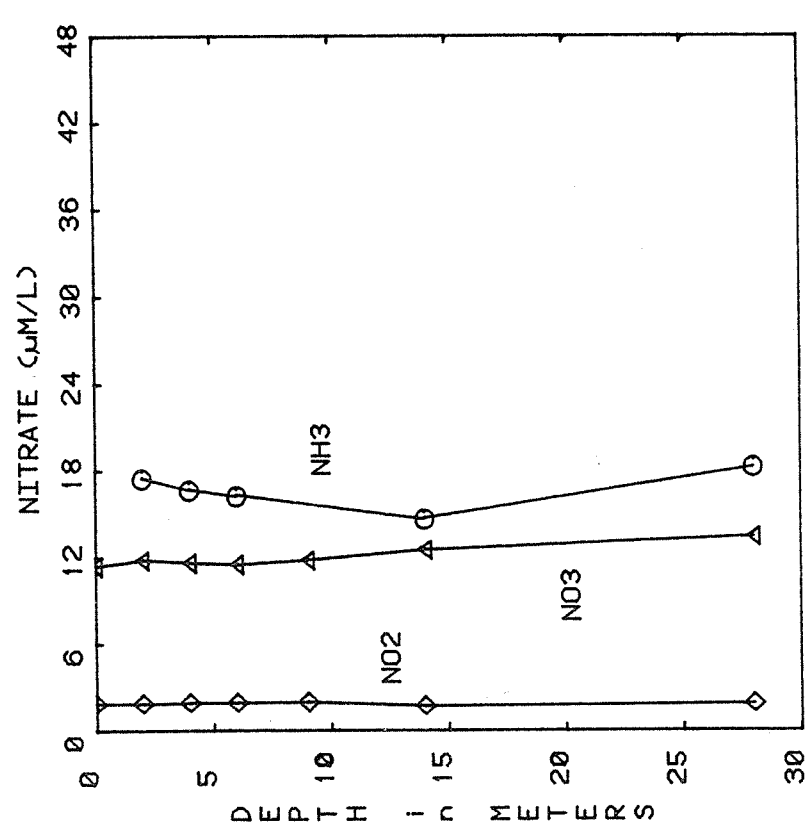
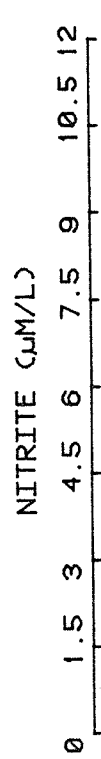
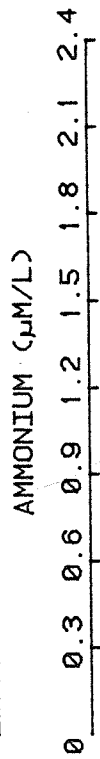


Fig. 24-4

Nansen data, Station 4.

ATLANTIS II (108-3): 49,50; #5 (NANSEN)
3/25/81 0900 : 0950

SIGMA-t

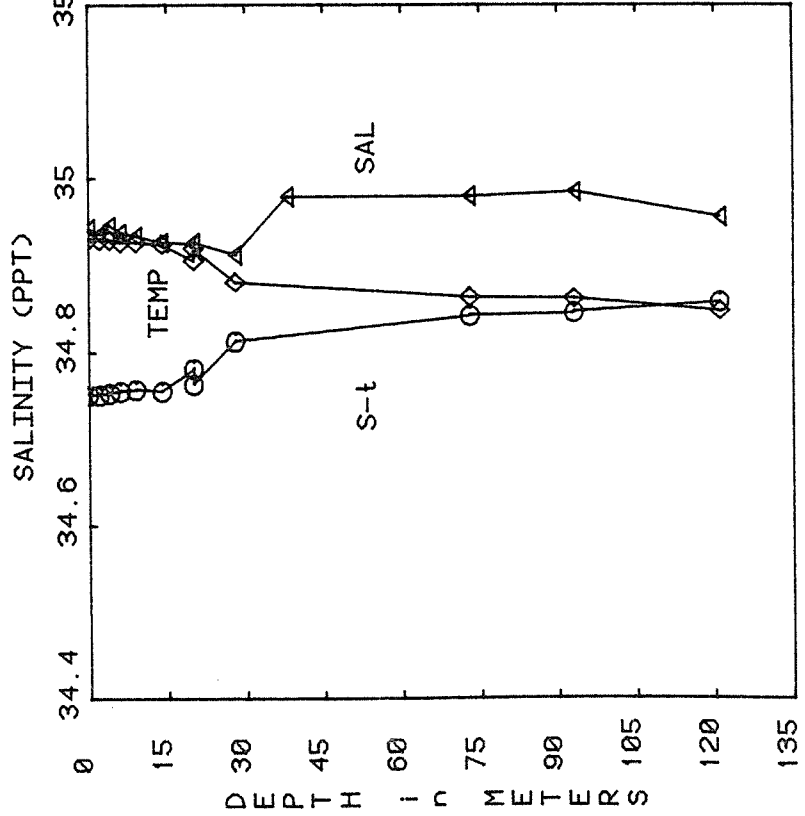
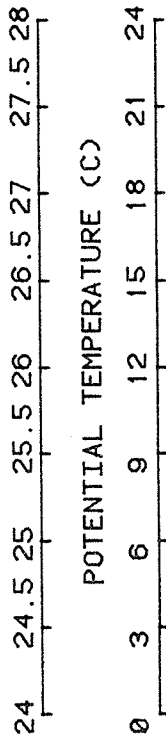
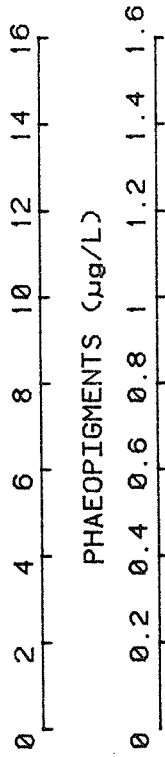


Fig. 26-5

ATLANTIS II (108-3): 49,50; #5 (NANSEN)
3/25/81 0900 : 0950

CHLOROPHYLL-a (µg/L)



PHAEOPIGMENTS (µg/L)

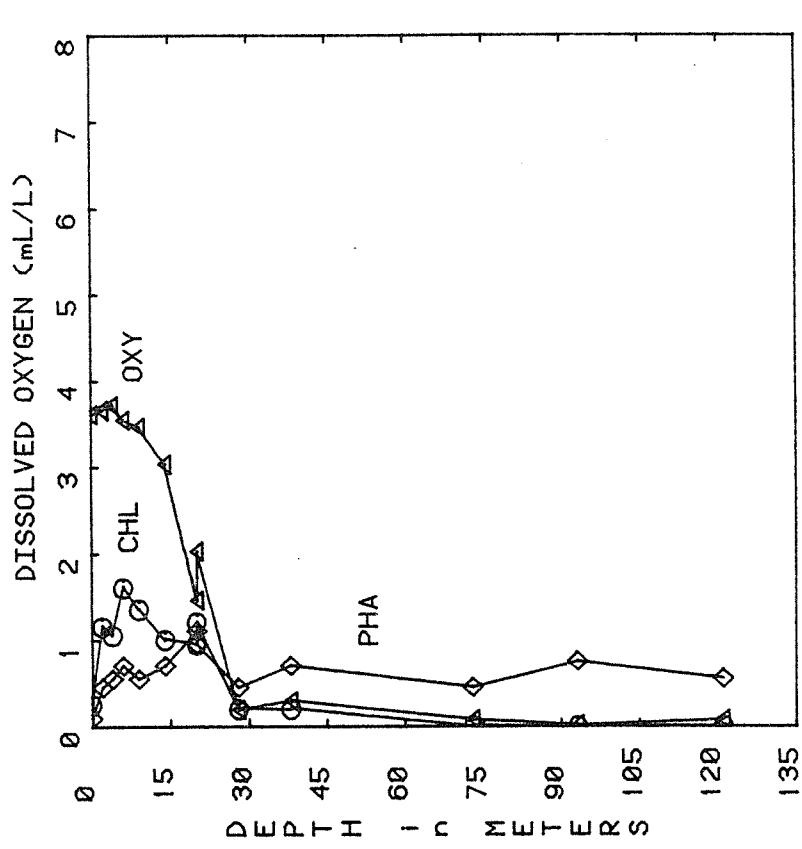


Fig. 27-5

ATLANTIS II (108-3): 49,50; #5 (NANSEN)
3/25/81 0900 : 0950

AMMONIUM $\mu\text{M/L}$

0 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4

NITRITE $\mu\text{M/L}$

0 1.5 3 4.5 6 7.5 9 10.5 12

NITRATE $\mu\text{M/L}$

0 6 12 18 24 30 36 42 48

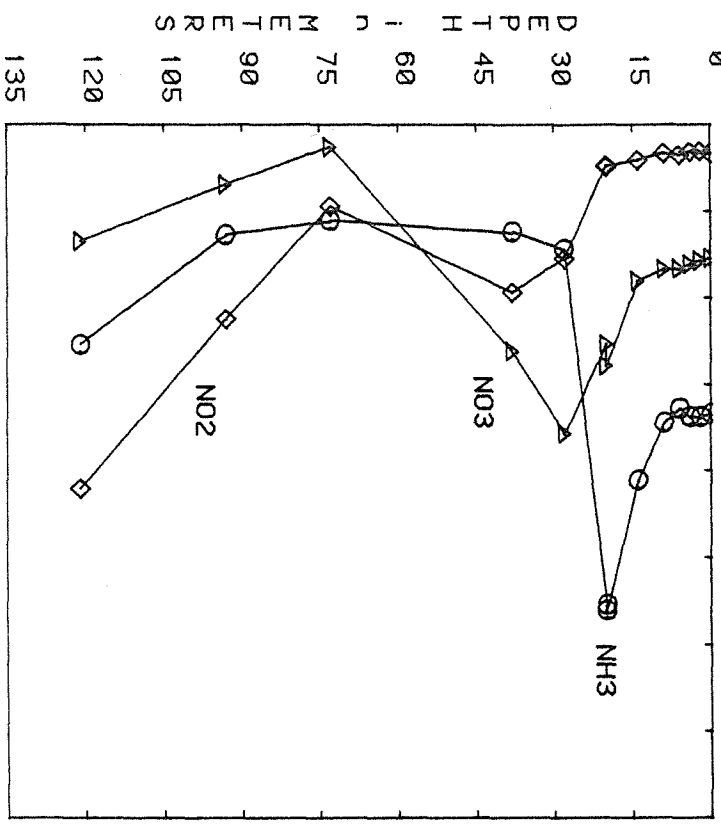


Fig. 28-5

ATLANTIS II (108-3): 49,50; #5 (NANSEN)
3/25/81 0900 : 0950

SILICATE $\mu\text{M/L}$

0 7.5 15 22.5 30 37.5 45 52.5 60

PHOSPHATE $\mu\text{M/L}$

0 0.5 1 1.5 2 2.5 3 3.5 4

TOTAL NITROGEN $\mu\text{M/L}$

0 6 12 18 24 30 36 42 48

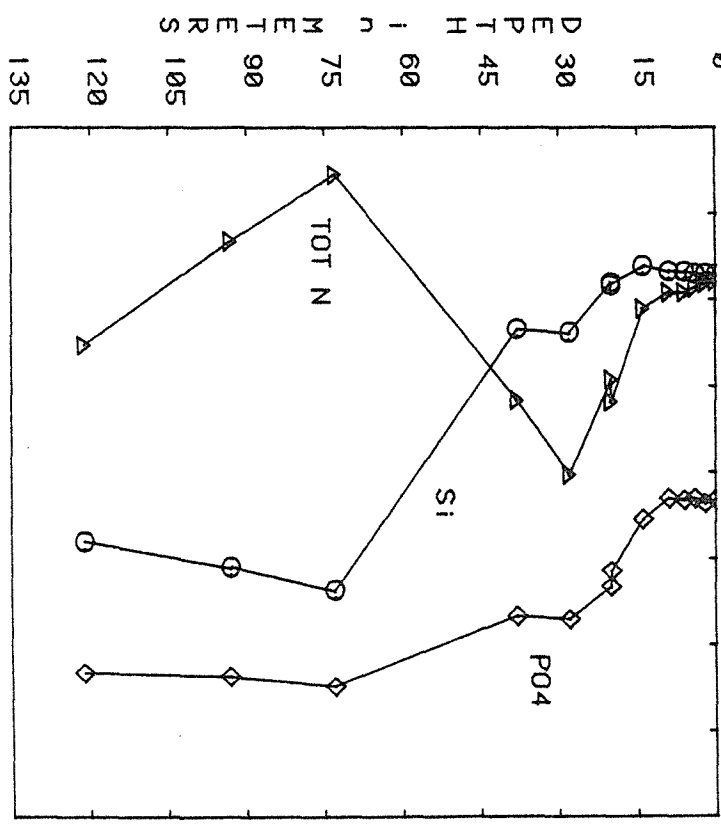
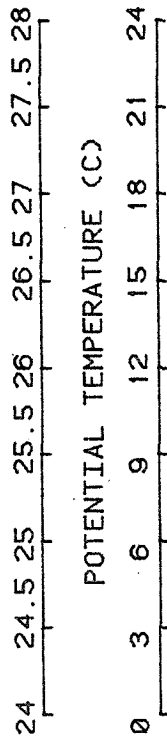


Fig. 29-5

Nansen data, Station 5.

ATLANTIS II (108-3): 90,92; #6 (NANSEN)
4/1/81 0908 : 1107

SIGMA-t



SALINITY (PPT)

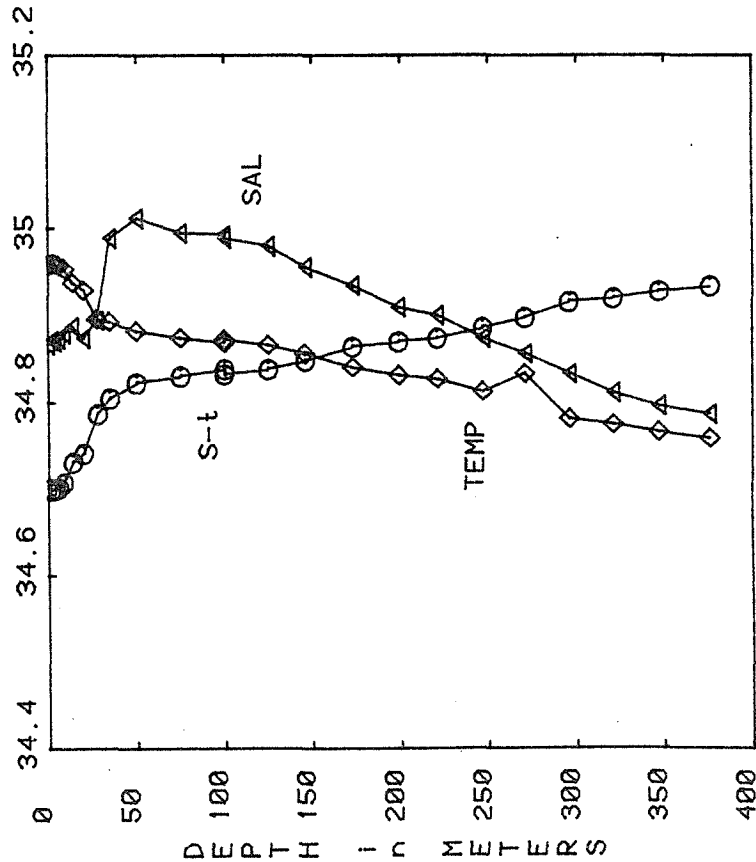
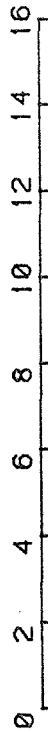


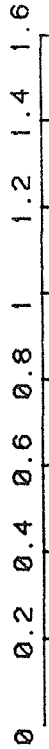
Fig. 30-6

ATLANTIS II (108-3): 90,92; #6 (NANSEN)
4/1/81 0908 : 1107

CHLOROPHYLL-a (µg/L)



PHAEOPIGMENTS (µg/L)



DISSOLVED OXYGEN (mL/L)

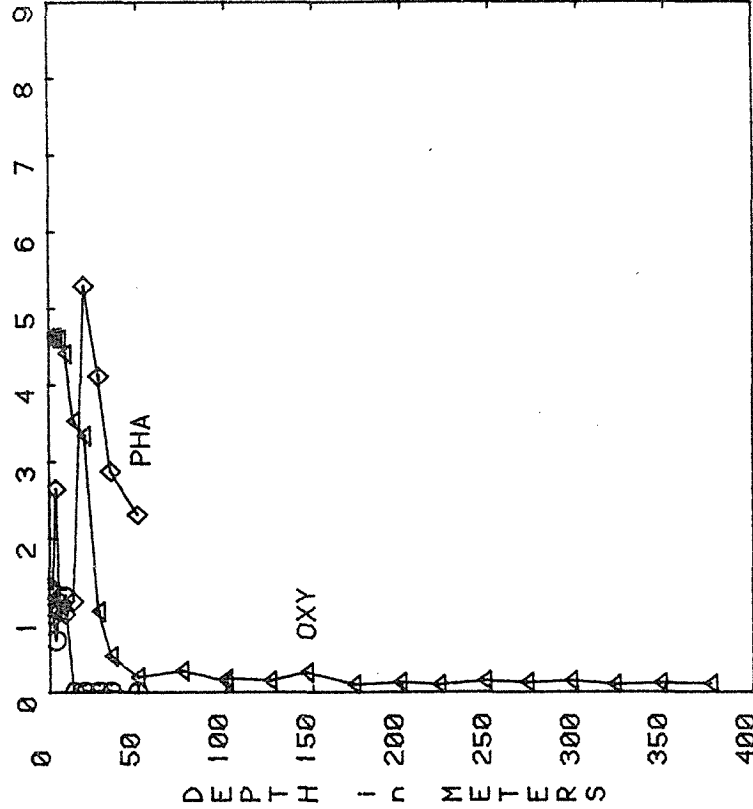
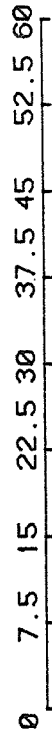


Fig. 31-6

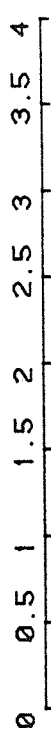
Nansen data, Station 6.

ATLANTIS II (108-3): 90,92; #6 (NANSEN)
4/1/81 0908 : 1107

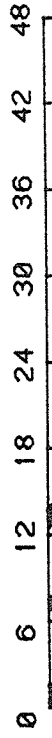
SILICATE $\mu\text{M/L}$



PHOSPHATE $\mu\text{M/L}$



TOTAL NITROGEN $\mu\text{M/L}$

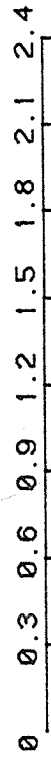


DEPTH in METERS

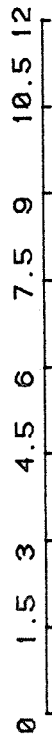
Fig. 33-6

ATLANTIS II (108-3): 90,92; #6 (NANSEN)
4/1/81 0908 : 1107

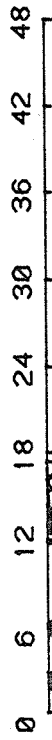
AMMONIUM $\mu\text{M/L}$



NITRITE $\mu\text{M/L}$



NITRATE $\mu\text{M/L}$



DEPTH in METERS

Fig. 32-6

Nansen data, Station 6.

TEMPERATURE, DEPTH, SALINITY, DENSITY, DISSOLVED OXYGEN, NITRATE, NITRITE
AMMONIUM, PHOSPHATE, SILICATE, CHLOROPHYLL A, PHAEOPIGMENT,
PARTICULATE ORGANIC CARBON (POC), AND PARTICULATE ORGANIC NITROGEN (PON)
DATA FOR NANSEN, NISKIN, AND BODMAN CASTS FOR STATIONS 1-6
(TABLE 1).

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 1
 7°14.0'S, 80°48'W
 Water Column Depth: 240 m
 Nansen Cast

Date (Local)	Time (Local)	Cast No.	Sample	Wire Out (m)	°C in situ T _w	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp. (°C)	σ _t	σ _o	Dissolved Oxygen (ml/l)	Nitrate (Micromoles/liter)	Nitrite (Micromoles/liter)	Phos phate ¹ (micromoles/liter)	Sili- cate
3/13/81	0830-	1	A	0	21.75	0	35.004	21.75	24.32	28.27	7.31	0.08	0.10	0.13	1.15
	0855		B	5	21.74	5	35.009	21.74	24.33	28.27	7.36	0.10	0.09	0.19	1.19
			C	10	21.08	10	35.010	21.08	24.51	28.27	4.14	0.18	0.15	0.43	1.86
			D	15	18.72	15	35.024	18.72	25.13	28.28	0.55	12.3	2.78	1.02	4.94
			E	20	16.64	20	34.995	16.64	25.62	28.26	1.49	28.1	2.81	2.06	10.8
			F	25	15.91	25	35.013	15.91	25.81	28.27	0.26	30.7	0.16	2.08	13.0

¹ Phosphate data are only approximate.

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 1
 7°13'S, 80°49'W
 Water Column Depth: 240 m
 Nissen and Bodman Casts

Accepted Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	°C in situ T_{90}	Accepted Depth (m)	Salinity ‰	Pot. Temp. (°C)	σ_t	σ_θ	Dissolved Oxygen (ml/l)	POC ($\mu\text{g/l}$)	PON ($\mu\text{g/l}$)	Nitrate (Micromoles/liter)	Nitrite	Phosphate	Silicate
3/13/81	0930	7°14.0'S, 80°48'W	2	A 1 (B)	Nan Bod	7	14.31	> 25 ²	34.993	14.31	26.14	28.26	0.98	1990	308	28.9	0.13	1.99	19.2
						7		> 25	34.997			28.26	2.18			1.66	0.44	0.51	2.55
3/13/81	1245-1252	7°12'S, 80°49'W	3	A 2 (N)	Nan 30 Nis	7	21.853	7	35.007	21.85	24.30	28.27	6.65	--	--	0.00	0.03	0.28	1.04
						7	--	7	--	--	--	--	--	--	--	--	--	--	--
3/13/81	1300	7°12'S, 80°49'W	4	3 (N)	30 Nis	7	--	7	35.009	--	--	28.27	7.17	2850	420	0.90	0.15	0.51	1.66

1 Phosphate data are only approximate.
 2 Depth estimated by referring to Cast 1.
 3 T_{90} , μ

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 2
 15°23'S, 75°57'W
 Water Column Depth: 4100 m
 Nansen Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Wire Out (m)	°C in situ T _w	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp. (°C)	σ _t	σ _o	Dissolved Oxygen (ml/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/16/81	1007	15°26'S, 75°56'W	6	A	0	24.02	0	35.093	24.02	23.74	28.34	5.64	0.05	0.04	0.00	0.34	0.87
				B	5	24.00	5	35.100	24.00	23.74	28.34	5.63	0.00	0.03	0.00	0.30	0.94
				C	10	23.99	10	35.094	23.99	23.75	28.34	5.55	0.02	0.02	0.00	0.30	0.84
				D	15	23.91	15	35.094	23.91	23.77	28.34	5.58	0.03	0.04	0.00	0.33	0.82
				E	20	22.45	20	35.099	22.45	24.20	28.34	5.66	0.00	0.03	0.05	0.33	0.96
				F	25	20.72	25	35.046	20.72	24.64	28.30	6.77	0.00	0.04	0.09	0.29	0.68
				G	50	14.95	50	34.838	14.94	25.89	28.13	1.52	18.9	2.02	0.44	2.15	6.99
3/16/81	1050	"	7	A	100	13.56	94	34.958	13.55	26.28	28.23	1.02	13.8	4.34	0.00	2.69	31.8
				B	200		188	34.926	--		28.20	0.56	11.4	8.71	0.00	2.68	31.1
				C	300	12.13	286	34.867	12.09	26.48	28.16	0.70	16.8	7.65	0.07	2.71	29.8
				D	400	10.59	381	34.765	10.54	26.68	28.07	0.16	27.1	3.95	0.00	2.77	32.8
				E	500	8.84	471	34.663	8.79	26.91	27.99	0.08	37.2	0.12	0.00	2.95	37.8
				F	600	--	564	34.574	--	--	27.92	0.68	39.1	0.13	0.00	3.12	40.6
				G	750	--	705	34.531	--	--	27.89	0.70	41.5	0.14	0.11	2.90	53.1

Date (Local)	Time (Local)	Lat. S., Long. W	Cast No.	Sample No.	Bottle Type	Wire Out (m)	°C in situ T _w	Accepted Depth (m)	Salinity ‰	Pot. Temp. (°C)	σ _t	Dissolved Oxygen (ml/l)	Nitrate	Nitrite (micromoles/liter)	NH ₄	PO ₄	SI	POC (μg/l)	PON (μg/l)
3/15/81	2230- 2310	15°22'S, 75°58'W	5	3 2 1	10 " "	5 100 300	-- 13.55 11.79	5 97 292	-- -- --	-- -- --	-- -- --	-- -- --	-- 13.8 17.3	-- 5.44 6.55	0 0	-- 2.77 2.76	-- 27.6 30.3	-- -- --	-- -- --
3/16/81	1135- 1158 1410- 1510	15°24'S, 75°58'W 15°30'S, 75°53'W	8 9	A 4-B A 5-B	Nan Bod Nan Bod	17 25 293 300	19.86 -- 12.10 --	17 25 290 297	-- 34.989 -- 34.847	19.86 -- 12.06 --	24.81 -- 26.48 --	-- 7.20 0.16	-- 0.09 18.2	-- 0.0 7.15	0.25 -- --	0.27 -- --	1.0 -- 30.1	402 -- 59.7	55.0 -- 5.55
3/16/81	1512- 1820	15°27'S, 75°53'W	10 ¹	5 4 D 13 A B C 6-N 7-N 8-B	NIO NIO Nan NIO Nan Nan Nan 30 NIs 30 NIs 10 NIs Bod	15 25 93 100 600 750 1480 1490 1500 1510 1520	-- -- 13.56 -- -- 7.88 -- -- 3.24 --	15 25 93 100 432 538 1362 1371 1380 1388 1398	-- -- -- -- 34.712 34.610 34.579 34.580 34.579 34.582	-- -- -- -- 7.82 -- -- -- 3.14 --	-- -- -- -- 27.02 -- -- -- 27.563 --	-- -- -- -- 0.07 0.26 2.02 2.22 2.92 2.062 1.86	-- -- -- -- 33.3 39.1 42.6 42.3 42.5 42.7	-- -- -- -- 0.23 0.03 0.02 0.03 0.02 0.16	-- -- -- -- -- -- -- -- -- -- --	-- -- -- -- 34.0 37.6 110.6 112.0 111.3 101.8	-- -- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- -- --
3/16/81	1900	15°25'S, 75°55'W	11	9-B	Bod	0	--	0	34.086	--	--	5.74	0.08	0.0	--	--	0.89	109	12.8
2005- 2250	2005- 2250	15°21'S, 75°59'W (G111)	12	A	Nan	1500 1520 1530	3.29 -- --	1413 1433 1443	34.596 -- --	3.18 -- --	27.57 -- --	2.06 -- --	-- -- --	-- -- --	-- -- --	-- -- --	3.16 -- --	-- -- --	-- -- --

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 2
 15°23'S, 75°57'W
 Water Column Depth: 4100 m
 Niskin and Bodman Casts

(Continued)

Date (Local)	Time (Local)	Lat. S., Long. W	Cast No.	Sample No.	Bottle Type	Wire Out (m)	°C in situ T _w	Accepted Depth (m)	Salinity ‰	Pot. Temp. (°C)	σ _t	σ _θ	Dissolved Oxygen (ml/l)	Nitrate (micromoles/liter)	Nitrite (micromoles/liter)	NH ₄ (μg/l)	PO ₄ (μg/l)	Si	POC (μg/l)	PON (μg/l)
3/17/81	0900- 1040	15°28'S, 75°55'W (G111)	13	A	Nan	2500 2520 2530	2.13	2312	34.688	1.96	27.74	28.01	3.21	--	--	--	3.12	--	--	--
3/17/81	1135- 1438	15°26'S, 75°59'W (G111)	14	A	Nan	3500 3520 3530	1.99	3314	34.692	1.72	27.76	28.02	3.21	--	--	--	2.81	--	--	--
3/17/81	1533	15°24'S 76°01'W	15	3	10 N1s	50	15.22 ⁴	50	34.895	15.21	25.87	28.18	0.98	11.0	6.05	0.8	2.33	6.06	--	--
				4	"	100	--	100	34.962	--	--	28.23	0.38	13.6	3.27	--	2.67	31.2	--	--
				5	"	170	13.14	159	34.932	13.12	26.36	28.21	0.31	11.2	7.14	--	2.69	31.9	--	--
				7	"	240	--	226	--	--	--	--	0.51 ⁵	13.6	8.55	--	2.61	30.2	--	--
				1	"	250	--	235	--	--	--	--	0.20	13.7	8.48	--	2.70	30.6	--	--
				2	"	260	12.52	248	--	--	--	--	0.45	14.4	8.17	--	2.68	30.1	--	--
				6	"	300	12.04	281	--	--	--	--	0.20	18.5	6.70	--	2.69	29.8	--	--
3/17/81	1600	"	16		10 N1s	0 25	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --

¹Cast was tripped twice (15 m - 750 m, then 1480 m - 1520 m).

²Mean of 2 determinations, 2.09 and 2.04.

³Used S‰ from nearest bottle to calculate σ_t.

⁴T_{w,u}

⁵Bubble.

R/V Atlantis II, Cruise No. 108, Leg 3

Station 2 (reoccupied)

15°27'S, 75°54'W

Water Column Depth: ~ 4250 m

Nansen Casts

Date (Local)	Time (Local)	Lat. S., Long. W.	Cast No.	Sample	Wire Out (m)	°C in situ Tw	Nansen Accepted Depth (m)	Pot. Temp (°C)	σ_t	σ_o	Dissolved Oxygen (ml O ₂ /l)	Chloro- phyll (µg/l)	Phaeo- pigments (µg/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/29/81	0923	15°26'S, 75°55'W	68	A	0	21.50	0	35.052	21.50	24.42	28.31	5.43	0.09	0.01	0.01	0.11	0.34	1.04
				B	10	21.51	10	35.051	21.51	24.41	28.30	5.63	0.04	0.02	0.00	0.10	0.34	1.04
				C	20	21.47	20	35.044	21.46	24.42	28.30	5.78	0	0.02	0.00	0.13	0.32	1.04
				D	25	19.17	25	34.991	19.16	24.99	28.26	7.69	0.32	0.02	0.01	0.10	0.16	1.32
				E	30	17.40	30	34.946	17.39	25.40	28.22	4.87	0	0.01	0.02	0.11	0.61	2.57
				F	35	16.41	35	34.920	16.40	25.61	28.20	1.74	--	6.19	1.62	0.31	1.28	2.83
				G	40	16.09	40	34.950	16.08	25.71	28.22	0.73	0.16	20.5	0.98	0.55	2.00	3.02
				H	45	15.47	45	34.935	15.46	25.84	28.21	0.78	0	23.8	0.07	0.08	2.43	5.85
				I	50	15.40	50	34.957	15.39	25.87	28.23	0.70	0	23.7	0.07	0.08	2.45	6.38
				J	60	14.62	60	34.886	14.61	25.99	28.17	0.31	0.12	26.3	0.10	0.10	2.67	11.0
3/29/81	1035- 1115	15°28'S, 75°54'W	70	A	60	14.57	60	34.848	14.56	25.97	28.14	0.36	--	26.4	0.13	0.08	2.61	11.6
				B	75	--1	75	34.883	--	--	28.17	0.12	0.12	24.5	0.30	0.08	2.75	19.1
				C	100	13.32	101	34.840	13.30	26.22	28.14	0.18	0.15	18.4	0.22	0.08	2.86	24.1
				D	150	12.87	150	34.859	12.85	26.33	28.15	0.14		10.8	5.59	0.07	2.81	28.1
				E	200	12.56	202	34.891	12.53	26.42	28.18	0.16		14.0	8.44	0.08	2.74	29.7
				F	250	12.05	249	34.860	12.02	26.50	28.15	0.09		19.3	6.14	0.08	2.71	28.8
				G	300	11.53	299	34.828	11.49	26.57	28.12	--		27.6	2.39	0.10	2.80	30.7
				H	350	10.81	352	34.760	10.76	26.65	28.07	0.09		23.1	5.01	0.08	2.72	29.4
				I	400	9.98	400	34.699	9.93	26.75	28.02	0.18		33.5	0.04	0.10	2.89	31.8
				J	500	8.42	499	34.628	8.36	26.95	27.96	0.19		39.2	0.03	0.11	3.05	37.9

100 scale

R/V Atlantis II Cruise No. 108, Leg 3
 Station 2 (Reoccupied)
 15°23'S, 75°57'W
 Water Column Depth: 4250 m
 Bodman and Niskin Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	°C in situ T _w	Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ_t	σ_θ	Dissolved Oxygen (ml O ₂ /l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/28/81	1002	15°27'S, 75°55'W	62	A	Nansen	1000	4.69	958	34.526	4.61	27.36	27.88	1.13	40.1 ¹	0.1 ¹	0.0	3.23	66.0 ¹
				Gill	Niskin	1027	--	985	--	--	--	--	--	--	--	--	--	--
				Gill	Niskin	1032	--	990	--	--	--	--	--	--	--	--	--	--
1238		15°28'S, 75°55'W	63	A	Nansen	750	6.69	651	34.516	6.63	27.11	27.87	1.06	41.1 ²	0.05 ²	0.0	3.08	41.3 ²
				Gill	Niskin	777	6.13	701	34.495	6.06	27.17	27.86	1.16	40.0 ¹	0.01 ¹	0.01 ¹	3.04	44.4 ¹
				Gill	Niskin	782	--	730	--	--	--	--	--	--	--	--	--	--
				Gill	Niskin	782	--	735	--	--	--	--	--	--	--	--	--	--
1409			64	A	Nansen	500	9.52	432	34.692	9.47	26.82	28.02	0.05	35.0 ²	0.02	0.0	2.92	34.3 ²
				Gill	Niskin	527	8.63	486	34.640	8.58	26.92	27.97	0.11	38.9 ¹	0.01 ¹	0.0	3.00	38.0 ¹
				Gill	Niskin	532	--	516	--	--	--	--	--	--	--	--	--	--
				Gill	Niskin	532	--	521	--	--	--	--	--	--	--	--	--	--
1520		15°25'S, 75°53'W	65	A	Nansen	200	12.43	189	34.863	12.40	26.42	28.15	0.03	9.19 ²	7.30 ²	0.0	2.85	29.6 ²
				Gill	Niskin	250	12.40	236	34.877	12.37	26.44	28.16	0.05	19.0 ¹	5.67 ¹	0.0	2.67	28.3 ¹
				Gill	Niskin	277	--	--	--	--	--	--	--	--	--	--	--	--
				Gill	Niskin	282	--	--	--	--	--	--	--	--	--	--	--	--
1624- 1714		15°27'S, 75°54'W	66	A	Nansen	100	22.87	3	35.063	22.87	24.04	28.32	5.35	0.05 ²	0.02	0.11	0.36	1.37 ²
				Gill	Niskin	127	14.18	75	34.884	14.17	26.08	28.17	0.06	24.0 ²	0.09 ²	0.10	2.76	17.7 ²
				Gill	Niskin	127	13.38	99	34.829	13.36	26.20	28.13	0.12	19.8 ¹	0.15 ¹	0.06	2.81	23.1 ¹
				Gill	Niskin	132	--	126	--	--	--	--	--	--	--	--	--	--
				Gill	Niskin	132	--	131	--	--	--	--	--	--	--	--	--	--

1 Run on 3/30/81.
 2 Run on 3/31/81.

R/V Atlantis II Cruise No. 108, Leg 3

Station 2 (Reoccupied)

15°23'S, 75°57'W

Water Column Depth: 4250 m

Bodman and Niskin Casts

(continued)

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No. Sample	Bottle Type	Wire Out (m)	Accepted Depth (m)	Pot. Temp (°C)	σ_t	σ_θ	Dissolved Oxygen (ml O ₂ /l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/29/81	0850	15°27'S, 75°55'W	67	A Gill	77	71	--	--	27.88	1.13	16.0	0.32	0.18	2.92	25.2
"	0941	15°26'S, 75°55'W	69	10L Niskin	100	92	34.847	34.839	28.13	--	17.1	0.14	0.22	2.86	24.5
"	1137	15°27'S, 75°54'W	71	10L Niskin	40	--	--	--	--	--	23.2	0.22	0.20	2.01	6.23
"	1210	15°26'S, 75°57'W	72	Bodman	5	5	35.007	--	28.27	0.71	--	--	--	--	--
"	1256	15°26'S, 75°57'W	73	10L Niskin	150	133	34.854	12.86	26.33	0.18	11.9	4.86	0.04	2.92	28.1
"	1407	15°26'S, 75°57'W	74		793	684	34.495	5.92	27.18	1.01	42.6	0.03	0.23	3.12	48.9
					990	851									
					1000	860									
					1010	869									
					1020	877									
1637		15°23'S, 75°58'W	75	10L Niskin	2000		34.633		27.97	2.34	39.3	0.03	0.22	2.94	133.6
				PBM	30L Niskin	2050									
				PBM	30L Niskin	2060									
				PBM	30L Niskin	2070									

R/V Atlantis II Cruise No. 108, Leg 3
 Station 2 (Reoccupied)
 15°23'S, 75°57'W
 Water Column Depth: 4250 m
 Bodman and Niskin Casts
 (continued)

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No. Sample	Bottle Type	Wire Out (m)	°C in situ T _W	Accepted Depth (m)	Salinity ‰/‰	Pot. Temp (°C)	σ_t	σ_θ	Dissolved Oxygen (ml O ₂ /l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium (Micromoles/liter)	Phos- phate	Sili- cate
3/30/81	2108	15°27'S, 75°55'W	78	10L Nis	125	13.27	108	34.854	13.25	26.25	28.15	0.09	17.2	1.54	0.20	2.90	25.1
	2142	15°27'S, 75°55'W	79	30L Nis	300	--	288	--	--	--	--	--	--	--	--	--	--
		15°27'S, 75°55'W	79	30L Nis	290	--	278	--	--	--	--	--	--	--	--	--	--
		15°27'S, 75°55'W	79	10L Nis	280	11.89	270	34.844	11.85	26.51	28.14	0.18	21.1	5.21	0.19	2.77	28.9
	2240	15°26'S, 75°56'W	80	10L Nis	30	21.02	30	34.947	21.01	24.47	28.22	6.35	0.01	0.01	0.17	0.35	1.45
3/31/81	2320	15°28'S, 75°56'W	81	10L Nis	360	11.41	308	34.808	11.37	26.58	28.11	0.18	23.5	4.27	0.15	2.73	29.8
	0017	15°28'S, 75°56'W	82	Nis 1	575	8.48	507	34.633	8.42	26.94	27.97	0.14	39.8	0.04	0.14	3.11	38.9
		"	82	Nis 8	1500	1.70	1510	34.579	1.60	27.69	27.92	1.70	41.0	0.05	0.22	3.18	109.0
		"	82	Nis 7	3000	1.82	--	34.679	1.59	29.09	28.00	3.38	37.5	0.05	0.15	2.75	142.8
		15°24'S, 75°58'W	83	10L Nis	900	5.50	858	34.531	5.42	27.28	27.89	0.61	44.5	0.03	0.21	3.40	67.0
4/6/81	0231	15°24'S, 75°58'W	83	10L Nis	1000	5.07	874 ¹	34.537	4.99	27.33	27.89	0.79	44.2	0.03	0.39	3.33	72.9
	0317	"	84	Niskin	400	10.58	348 ¹	34.744	10.54	26.68	28.06	0.12	28.6	1.31	0.17	2.84	31.4
	0415	15°22'S, 75°59'W	85	10L Nis	90	13.51	87	34.824	13.50	26.17	28.12	0.12	20.0	0.21	0.26	2.83	22.1
	0457	"	86	Niskin	60	--	--	34.847	--	--	28.14	0.33	25.3	0.07	0.19	2.63	9.52
	0515	"	87	"	110	--	--	34.850	--	--	28.14	0.24	19.3	0.22	0.22	2.85	23.2
	0537	"	88	"	1020	--	--	--	--	--	--	--	--	--	--	--	--
	1134-	15°26'S, 75°58'S	117	"	1030	--	--	--	--	--	--	--	--	--	--	--	--
	1245	"	"	"	1040	--	--	--	--	--	--	--	--	--	--	--	--
	"	"	"	"	1050	--	--	--	--	--	--	--	--	--	--	--	--
	"	"	"	"	"	--	--	--	--	--	--	--	--	--	--	--	--

¹Estimated using mean depth factors of similar casts. Thermometric depth = 252, but this is obviously too shallow if one looks at T_W and S_W/‰.

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 3
 15°04'S, 75°29'W
 Water Column Depth: 75 m
 Nansen Cast

Date (Local)	Time (Local)	Lat. S., Long. W.	Cast No.	Sample	Wire Out (m)	°C in situ T _w	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ _t	σ _o	Dissolved Oxygen (ml O ₂ /l)	Chloro- phyll (μg/l)	Phaeo- pigments (μg/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/18/81	1605	15°04'S, 75°29'W	17	A	0	15.08	0	34.970	15.08	25.95	28.24	1.52	--	--	9.96	2.16	0.12	2.54	26.1
				B	2	15.05	2	34.968	15.05	25.96	28.24	1.51	3.8	0.12	10.0	2.14	0.08	2.52	26.2
				C	4	15.04	4	34.968	15.04	25.96	28.24	1.52	5.0	0.18	9.94	2.21	0.12	2.58	26.3
				D	7	14.62	7	34.968	14.62	26.05	28.24	1.26	5.6	--	10.7	2.06	0.13	2.54	26.4
				E	10		10	34.973	--		28.24	1.04	2.6	1.00	10.8	2.04	0.13	2.53	26.3
				F	15	14.70	15	34.973	14.70	26.04	28.24	0.94	3.8	0.26	10.2	2.16	0.16	2.60	27.3
				G	30	14.34	30	34.971	14.34	26.12	28.24	0.77	2.6	0.18	10.4	2.02	0.13	2.64	28.2
				H	40	14.32	40	34.970	14.32	26.12	28.24	0.73	4.7	0.32	10.7	1.96	0.16	2.64	28.3
				I	55	14.26	50	34.970	14.25	26.13	28.24	0.48	--	--	11.2	1.70	0.15	2.65	28.3
				J	70	13.94	70	34.970	13.93	26.21	28.24	0.13	--	--	0.1	0.29	1.05	3.13	39.7

Bodman Cast

3/18/81 1611 15°03'S 75°29'W 18

1 Bad protected thermometer.

R/V Atlantis II Cruise No. 108, Leg. 3
 OCZ NO Station (3a)
 Water Column Depth: 105-115 m (hydro sheet), 126-128 m (fathometer, 3/20/81)

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	in situ T _v	Accepted Depth (m)	Pot. Temp (°C)	Salinity ‰	σ _t	σ _θ	Dissolved Oxygen (mlO ₂ /l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium (micromoles/liter)	Phos- phate	Sili- cate
3/19/81	1322- 1400	15°03'S, 75°30'W	19	N1	101.N1s	20	14.78	20	14.78	34.957	26.02	28.23	1.28	14.1	0.74	--	2.432	19.0
			20	N2	101.N1s flask	0	14.83	20	14.83	34.958	26.01	28.23	1.481	13.1	0.82	--	2.352	18.2
3/20/81	1311-	15°06'S, 75°32'W	21	N2	101.N1s	5	--	5	--	34.904	--	28.19	4.79	5.35	0.40	0.21	1.26	4.93
			22	N1	101.N1s	5	--	5	--	34.905	--	28.19	4.80	5.47	0.38	0.27	1.26	4.53
			23	N2	"	5	16.64	5	16.64	34.906	25.55	28.19	4.99	5.21	0.44	0.26	1.17	4.35
			24	N1	"	20	15.21	20	15.21	34.880	25.86	28.17	2.14	15.6	0.74	0.70	1.90	8.50
			25	N2	"	20	15.19	20	15.19	34.908	25.88	28.19	2.30	15.0	0.63	1.01	1.94	9.08
			26	N1	"	20	15.25	20	15.25	--	--	--	--	--	--	--	--	--
			27	N2	"	40	15.13	40	15.13	34.920	25.90	28.20	1.94	14.9	0.64	1.36	2.08	9.37
			28	N1	"	40	14.49	623	14.48	34.946	26.07	28.22	0.29	19.6	0.20	0.48	2.69	21.5
			29	N2	"	80	13.98	80	13.97	34.976	26.20	28.24	0.06	5.99	3.55	0.22	2.86	33.4
			30	N1	"	80	13.95	80	13.94	34.973	26.21	28.24	0.04	1.02	1.78	0.24	3.15	37.6
			31	N2	"	100	13.93	100	13.92	34.971	26.21	28.24	0.00	0.0	0.09	1.29	3.29	40.7
			32	N1	"	100	13.92	100	13.90	34.970	26.21	28.24	0.00	0.0	0.04	1.40	3.17	40.9
3/20/81	1600	"	33	N2	"	85	13.98	85	--	--	--	--	--	--	--	--	--	--
				N3	"	38	--	38	--	--	--	--	--	--	--	--	--	--

1 "Blank" dissolved oxygen after stripping = 0.05.

2 Run on 3/21/81.

3 Interpolated value.

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 4
 15°07'S, 75°37'W
 Water Column Depth: 190 m
 Nansen Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Wire Out (m)	°C in situ	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ _t	σ _θ	Dissolved Oxygen (ml O ₂ /l.)	Chloro- phyll (μg/l)	Phaeo- pig- ments (μg/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/21/81	0940	15°07'S, 75°37'W	34	A	0	16.38	0	34.885	16.38	25.60	28.17	4.82	5.7	0.42	4.95	0.27	0.21	1.07	1.58
				B	2	16.35	2	34.893	16.35	25.62	28.18	4.87	5.7	0.47	5.12	0.29	0.24	1.10	2.04
				C	4	16.34	4	34.887	16.34	25.61	28.17	4.87	6.2	0.35	5.04	0.27	0.23	1.10	1.91
				D	6	--	6	34.928	--	--	28.21	5.04	6.8	0.50	5.25	0.32	0.23	1.00	2.15
				E	9	16.12	9	34.890	16.12	25.66	28.18	4.51	5.3	0.21	6.01	0.30	0.23	1.12	2.36
				F	14	15.94	14	34.894	15.94	25.71	28.18	3.87	5.6	0.50	8.37	0.33	0.41	1.34	3.23
				G	28	15.60	28	34.899	15.60	25.78	28.18	2.79	4.2	--	12.80	0.59	1.04	1.76	5.05
3/21/81	1035- 1100	15°06'S, 75°38'W	35	A	35	15.54	35	34.908	15.53	25.81	28.19	0.77	4.1	2.6	11.70	0.50	0.24	1.73	5.29
				B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
				C	75	14.49	75	34.977	14.48	26.10	28.24	0.21	0.2	0.36	15.90	2.36	0.10	2.72	23.4
				D	100	14.51	100	34.979	14.49	26.08	28.25	0.44	0.3	0.38	6.44	4.75	0.00	2.85	34.9
				E	125	13.77	125	34.974	13.75	26.24	28.24	0.45	0.6	0.23	2.65	4.13	0.00	2.97	37.9
				F	155	13.70	152	34.964	13.68	26.25	28.24	0.74	1.2	0.20	0.09	0.00	1.10	3.37	43.9
				G	185	13.38	182	34.949	13.35	26.30	28.22	0.45	0	0.50	1.10	5.51	0.00	3.18	40.5
3/24/81	1252	15°07'S, 75°37'W	43	A	0	17.95	0	34.944	17.95	25.27	28.22	3.05	2.2	0.21	11.40	0.47	--	--	17.90
				B	2	15.76	2	34.941	15.76	25.78	28.22	3.17	1.5	0.15	11.80	0.47	0.87	2.48	18.10
				C	4	15.77	4	34.948	15.77	25.79	28.22	3.09	2.0	0.15	11.60	0.48	0.83	2.39	18.30
				D	6	15.74	6	34.939	15.74	25.78	28.22	3.06	2.0	0.21	11.50	0.48	0.81	2.27	18.40
				E	9	15.67	9	34.937	15.67	25.80	28.21	3.06	2.6	0.71	11.80	0.49	--	--	18.20
				F	14	15.45	14	34.940	15.45	25.85	28.22	2.60	4.1	0.32	12.50	0.43	0.73	2.48	17.90
				G	28	15.36	28	34.939	15.36	25.87	28.22	2.12	1.5	0.23	13.40	0.47	0.91	2.41	17.90

1Bad bottle.

R/V Atlantis II Cruise No. 108, Leg 3

Station No. 4

15°07'S, 75°36'W

Water Column Depth: 190 m

Bodman and Niskin Casts

Date Time (Local)	Lat. S, Long. W	Cast No.	Sample Type	Bottle Type	Wire Out (m)	Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ_t	σ_θ	Dissolved Oxygen (ml/O ₂ /l)	Chloro- phyll (µg/l)	Phaeo Pig- ments (µg/l)	Nitrate	Nitrite (Micromoles/liter)	NH ₄ PO ₄	SI	POC	PON (µg/l)		
3/21/81 1200	15°07'S, 75°36'W	36	10	Bod	5	--	5	34.886	--	--	28.17	5.22	5.7	1.6	3.93	0.24	0.74	1.37	0.78	570	96.5
1315-	"	37	11	"	20	--	20	34.935	--	--	28.21	2.77	5.7	1.8	12.7	0.54	0.79	1.78	6.3	694	111
1340	"	38	A	Nan	43	15.96	43	--	15.95	26.76	--	--	--	--	--	--	--	--	--	--	--
1830	"	12	12	Bod	50	--	50	34.976	--	--	28.24	0.14	0.3	0.47	10.9	4.27	--	2.98 ¹	29.5	102	11.8
3/21/81 1910	15°07'S, 75°37'W	39	A	Nan	143	13.55	144	--	13.53	26.27	--	--	--	--	--	--	--	--	--	--	--
		13	13	Bod	150	--	151	34.951	--	--	28.22	0.00	0.0	0.44	1.43	2.33	--	3.25 ¹	40.5	66.8	9.82
2005	15°07'S, 75°36'W	40	14	Bod	10	--	10	34.915	--	--	28.20	2.86	0.8	0.10	9.92	0.56	--	1.80 ¹	5.43	326	57.5
2100	15°07'S, 75°36'W	41	15	Bod	3	--	3	34.929	--	--	28.21	--	0.1	0.30	7.74	0.51	--	1.64 ¹	4.91	385	62.7
2140	"	42	16	Bod	3	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/24/81 1315-	15°07'S, 75°37'W	44	17	Nis	3	--	3	--	--	--	--	--	2.4	0.38	--	--	--	--	--	--	--
1345	"	18	18	"	10	--	10	--	--	--	--	--	2.6	0.21	--	--	--	--	--	--	--
		19	19	"	25	--	25	--	--	--	--	--	2.4	0.23	--	--	--	--	--	--	--
		20	20	"	45	--	45	--	--	--	--	--	0	0.06	--	--	--	--	--	--	--
1349-	"	45	21	Bod	0	--	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1415	"																				

1Run on 3/25/81.

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. C (4a)
 15°10'S, 75°37'W
 Water Column Depth: 400 m

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	°C in situ T _w	Accepted Depth (m)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
3/24/81	1920- 1955		46		--	--	--	--	--	--	--	--	--
	2055- 2115	15°10'S, 75°37'W	471	A	Nan	200	14.55	--	--	--	0.32	2.66	--
				B	"	225	12.49	212	--	--	0.26	2.80	--
				C	"	232	--	--	--	--	0.33	2.84	--
				D	"	250	17.93	--	--	--	1.11	1.84	--
				E	"	275	11.27	260	--	--	0.23	2.86	--
				F	"	300	11.16	286	--	--	0.29	2.84	--
				G	"	325	--	--	--	--	0.28	2.96	--
3/24/81	2142	15°10'S, 75°38'W	482	A	Nan	25	15.66	23	--	--	--	--	--
				B	"	50	14.03	46	--	--	--	--	--
				C	"	75	13.67	70	--	--	--	--	--
				D	"	100	13.44	94	--	--	--	--	--
				E	"	125	--	116	--	--	--	--	--
				F	"	143	--	133	--	--	--	--	--
				G	NIO	150	--	140	--	--	--	--	--
				H	Nan	175	--	163	--	--	--	--	--
				I	"	350	--	326	--	--	--	--	--

1 Accepted depths are given only for those bottles whose thermometers functioned. The average depth factor for these three Nansens = 0.94. This may be applied to the other Nansens to determine their accepted depths, providing that other chemical determinations indicate that they did not malfunction. Bottle "D" at 250 m. wire out, however, is definitely bad.

2 Good thermometric depths on bottles A through D. Average depth factor = .93 used to determine accepted depths of Bottles E through I.

R/V Atlantis II Cruise No. 108, Leg 3
 Station No. 5
 15°05'S, 75°34'W
 Water Column Depth: 135 m
 Nansen Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Wire Out (m)	°C in situ Tw	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ_t	σ_θ	Dissolved Oxygen (ml/l)	Chloro- phyll ($\mu\text{g/l}$)	Phaeo- pigments ($\mu\text{g/l}$)	Nitrate	Nitrite (Micromoles/liter)	Ammonium (micromoles/liter)	Phos- phate	Sili- cate
3/25/81	0900	15°05'S, 75°34'W	49	A	0	15.90	0	34.943	15.90	25.75	28.22	3.61	0.5	0.02	9.25	0.49	1.00	2.16	12.80
				B	2	15.87	2	34.936	15.87	25.75	28.21	3.66	2.3	0.09	9.42	0.46	1.01	2.18	12.70
				C	4	15.87	4	34.946	15.87	25.76	28.22	3.72	2.1	0.11	9.67	0.47	1.01	2.15	12.70
				D	6	15.80	6	34.938	15.80	25.77	28.21	3.55	3.2	0.14	10.00	0.52	0.98	2.16	12.50
				E	9	15.80	9	34.934	15.80	25.78	28.21	3.47	2.7	0.11	10.00	0.49	1.03	2.15	12.50
				F	14	15.73	14	34.927	15.73	25.77	28.20	3.04	2.0	0.14	10.80	0.61	1.23	2.27	12.00
				G	20	15.17	20	34.925	15.17	25.90	28.20	1.46	1.9	0.22	16.70	0.72	1.68	2.57	13.70
3/25/81	0950	15°04'S, 75°34'W	50	A	20	15.58	20	34.927	15.58	25.81	28.20	2.03	2.4	0.19	15.20	0.70	1.66	2.66	13.50
				B	28	14.42	28	34.912	14.42	26.06	28.19	0.20	0.4	0.09	21.40	2.32	0.43	2.85	17.80
				C	38	-- 1	38	34.979	--	--	28.25	0.30	0.4	0.14	15.70	2.90	0.37	2.83	17.50
				D	53	-- 2	6	34.936	--	--	28.21	3.30	3.4	0.32	10.80	0.56	1.28	2.27	12.9
				E	73	13.92	73	34.980	13.91	26.21	28.25	0.08	0.0	0.09	1.53	1.41	0.33	3.24	40.2
				F	93	13.88	93	34.985	13.87	26.23	28.25	0.02	0.0	0.15	4.15	3.36	0.38	3.18	38.2
				G	123	13.46	121	34.956	13.44	26.29	28.23	0.08	0.0	0.11	8.10	6.30	0.76	3.16	36.0

-47-

1 Bad thermometer
 2 Bottle opened at ~ 6 m

R/V Atlantis II Cruise No. 108, Leg 3

Station No. 5

15°05'S, 75°34'W

Water Column Depth: 135 m

Bodman and Niskin Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Wire Out (m)	in situ T _w	Accepted Depth (m)	Pot. Temp (°C)	σ _t	Dissolved Oxygen (ml/l)	Chloro- phyll (µg/l)	Phaeo- pigments (µg/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate	POC (µg/l)	PON (µg/l)		
3/25/81	1315	15°04'S, 75°36'W	51	22	20	--	20	--	34.926	--	28.20	1.31	1.4	0.13	16.9 ¹	0.57 ¹	1.54	2.64	13.7 ¹	181	27.4
"	1400	15°03'S, 75°35'W	52	A	4	--	4	--	--	--	--	--	--	--	--	--	--	--	--	--	
"	1455	"		23	10	--	10	--	34.940	--	28.22	3.62	13.5	0	9.04 ¹	0.38 ¹	0.90	1.97	10.8 ¹	359	79.6
				24	3	--	3	--	34.940	--	28.22	4.46	0.5	0.26	6.51 ¹	0.35 ¹	0.63	1.91	10.2 ¹	574	305
3/26/81	1037	15°05'S, 75°35'W	53		5	15.75	5	15.75	34.927	15.75	25.77	28.20	3.09		11.7 ³	0.60 ³	0.89	2.03	9.33 ³	--	--
			54												21.3 ³	0.34 ³	1.03	2.61	13.6 ³	--	--
	1127	15°03'S, 75°35'W	55		20	14.86	20	14.86	34.906	14.86	25.95	28.19	0.71		22.0 ³	0.30 ³	--	2.74 ¹	16.4 ³	--	--
	1257	15°02'S, 75°36'W	56		30	14.57	30	14.57	34.907	14.57	26.01	28.19	0.36		15.3 ³	2.66 ³	0.71	2.70	30.3 ³	--	--
	1458	15°03'S, 75°36'W	57		60	14.03	60	14.02	34.980	14.02	26.18	28.25	0.05		12.1 ³	5.25 ³	0.29	2.78	32.0 ³	--	--
	1633	15°02'S, 75°36'W	58		95	13.58	86	13.57	34.958	13.57	26.26	28.23	0.001		12.6 ³	5.54 ³	0.0	2.83	30.9 ³	--	--
	1754	15°04'S, 75°35'W	59		130	13.40	125	13.38	34.950	13.38	26.30	28.22	0.03			--	--	--	--	--	--
	1825	15°04'S, 75°35'W	60		3	--	3	--	--	--	--	--	--			--	--	--	--	--	--
3/27/81	2223	15°00'S, 75°40'W	61		95	13.70	89	13.69	34.976	13.69	26.25	28.24	0.04		18.8 ¹	3.93 ²	0.0	2.60	28.1 ²	--	--
				102	96	--	96	--	34.959	--	28.23	0.12			20.2 ²	2.94 ²	0.0	2.59	27.9 ²	--	--
3/30/81	1030-	14°59'S, 75°38'W	76		5	--	5	--	--	--	--	--	--			--	--	--	--	--	--
	1047			30	30	--	30	--	--	--	--	--	--			--	--	--	--	--	--
	1728-	15°03'S, 75°28'W	77		5	--	5	--	--	--	--	--	--			--	--	--	--	--	--
	1738																				

1 Run on 3/30/81
2 Run on 4/6/81
3 Run on 3/29/81

R/V Atlantis II, Cruise No. 108, Leg 3

Station 6

15°09'S, 75°41'W

Water Column Depth: 390 m

Nansen Casts

Date (Local)	Time (Local)	Lat. S., Long. W.	Cast No.	Sample	Wire Out (m)	°C in situ Tw	Nansen Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ _t	σ _θ	Dissolved Oxygen (ml O ₂ /l)	Chloro- phyll (μg/l)	Phaeo- pigments (μg/l)	Nitrate ¹ (Micromoles/liter)	Nitrite ¹ (Micromoles/liter)	Ammonium	Phos- phate	Sili- cate
4/1/81	0908	15°09'S, 75°41'W	90	A	0	16.72	0	34.867	16.72	25.50	28.16	4.62	2.0	0.24	5.84	0.55	0.84	1.09	1.24
				B	2	16.78	2	34.872	16.78	25.49	28.16	4.62	1.8	0.24	5.95	0.55	0.62	1.12	1.22
				C	4	16.77	4	34.870	16.77	25.49	28.16	4.63	1.2	0.47	5.84	0.55	0.74	1.12	1.24
				D	6	16.72	6	34.873	16.72	25.50	28.16	4.60	1.9	0.21	5.83	0.56	0.80	1.10	1.24
				E	9	16.61	9	34.879	16.61	25.53	28.17	4.41	2.2	0.18	6.00	0.55	0.85	1.21	1.52
				F	14	16.13	14	34.888	16.13	25.65	28.17	3.53	0	0.21	7.73	0.59	2.18	1.67	3.30
				G	20	15.87	20	34.874	15.87	25.70	28.16	3.34	0	0.94	9.28	0.64	1.87	1.75	4.00
				H	28	14.89	28	34.895	14.88	25.93	28.18	1.05	0	0.73	18.5	0.47	1.35	2.54	14.8
				I	35	14.81	35	34.989	14.80	26.02	28.26	0.47	0	0.51	15.3	0.41	1.39	2.80	20.9
				J	50	14.48	50	35.012	14.47	26.11	28.27	0.20	0	0.41	10.9	2.15	0.25	2.91	27.9
				K	75	14.25	75	34.995	14.24	26.15	28.26	0.28	--	--	7.04	3.01	0.29	2.98	31.8
				L	100	14.08	100	34.993	14.06	26.19	28.26	0.14	--	--	8.84	3.20	0.28	2.97	32.9
4/1/81	1107	15°09'S, 75°41'W	92	A	100	14.19	100	34.989	14.17	26.16	28.26	0.18	--	--	5.71	3.06	0.22	2.94	33.9
				B	125	14.02	125	34.980	14.00	26.19	28.25	0.15	--	--	13.9	3.06	0.21	2.81	30.9
				C	150	13.71	146	34.956	13.69	26.24	28.23	0.26	--	--	16.8	3.67	0.25	2.69	28.3
				D	175	13.25	173	34.935	13.22	26.32	28.21	0.10	--	--	17.4	4.25	0.25	2.73	28.4
				E	200	12.98	199	34.910	12.95	26.35	28.19	0.13	--	--	16.7	4.89	0.25	2.77	29.1
				F	225	12.85	221	34.901	12.82	26.37	28.18	0.10	--	--	16.9	5.55	0.26	2.78	28.8
				G	250	12.44	247	34.875	12.40	26.43	28.16	0.15	--	--	19.0	5.47	0.22	2.69	28.0
				H	275	12.06	271	34.857	12.02	26.49	28.15	0.13	--	--	23.4	3.87	0.26	2.75	28.7
				I	300	11.50	296	34.834	11.46	26.58	28.13	0.15	--	--	25.1	3.96	0.18	2.71	30.4
				J	325	11.30	321	34.812	11.26	26.60	28.11	0.10	--	--	23.6	4.88	0.33	2.85	31.9
				K	350	11.05	347	34.797	11.00	26.64	28.10	0.12	--	--	24.4	4.94	0.31	2.79	33.0
				L	375	10.82	376	34.787	10.77	26.67	28.09	0.11	--	--	26.3	4.32	0.32	2.91	33.4

R/V Atlantis II Cruise 108, Leg 3

Station 6

15°09'S, 75°41'W

Water Column Depth: 390 m

Bodman and Niskin Casts

°C

Date (Local)	Time	Lat. S, (Local) Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	Accepted Depth (m)	Pot. Salinity ‰	Pot. Temp (°C)	σ _t	Dissolved Oxygen O ₂ (ml O ₂ /l)	Chloro- phyll (µg/l)	Phaeo- pigments (µg/l)	POC (µg/l)	PON (µg/l)	Nitrate ² (Micromoles/liter)	Nitrite ² (Micromoles/liter)	Ammonium ¹ (Micromoles/liter)	Phos- Sili- cate ¹	
4/1/81	0940	15°08'S, 75°40'W	91	25	Bodman	5	5	34.870		28.16	4.55	2.9	.24	932	153	6.30	0.59	0.81	1.24	1.30
"	1300	15°07'S, 75°41'W	93	26	Bodman	20	20	34.885		3.62	2.9	.24		166	29.6	7.39	0.58	1.45	1.59	2.76
"	1345	15°06'S, 75°42'W	94	27	"	100	100	34.970		28.24	0.23			109	44.4	13.7	3.12	0.0	2.75	28.6
"	1505	15°07'S, 75°40'W	95	A	Nansen	340	323	--		--	--	--	--	--	--	--	--	--	--	--
"	1755	15°08'S, 75°41'W	96	28 29	Bodman Bodman	350 10	332 10	34.811 34.866		28.11 28.16	0.08 4.43	0.7 ⁸	0.21	46.6 317	4.80 84.2	25.1 6.27	4.18 0.54	0.01 0.56	2.75 1.26	31.0 1.37
"	1820	15°08'S, 75°40'W	97	30	Bodman	5	5	34.859		28.15	4.62	0.8	0.59	495	98.6	7.01	0.58	0.39	1.22	1.47
4/2/81	0900	"	98	A	Nansen	190	180	--		--	--	--	--	--	--	--	--	--	--	--
"	1010	"	99	31 32	Bodman "	200 5	190 5	34.889 34.860		28.17 28.15	0.05 4.74	-- 0.8	-- .28	40.0 157	7.49 29.9	17.4 5.13	5.58 0.48	0.01 0.55	2.72 1.16	28.8 1.50
"	1110	"	100	33	"	50	50	34.978		28.25	0.05	0	.11	55.0	16.1	17.9	0.76	0.11	2.69	21.7
"	1312- 1408	15°08'S, 75°44'W	A	Gill	--	325 ³	291 ³	--		--	--	--	--	--	--	--	--	--	--	--
"	1509	15°06'S, 75°43'W	101	--	--	0 ⁴	204 ⁴	--		--	--	--	--	--	--	--	--	--	--	--
1544	"	"	B	Gill	--	18 ^{4,5} 225 ⁴	--	34.900	12.64	26.40	0.14	--	--	--	--	16.8	5.17	0.02	2.87	29.5
1645	"	"	102	--	--	125	115 ⁶	--		--	--	--	--	--	--	--	--	--	--	--
					Niskin	7	65 ⁷	34.996	14.19	26.16	0.08	--	--	--	--	11.9	3.13	0.04	2.85	31.2
					"	75	--	--		--	--	--	--	--	--	--	--	--	--	--

R/V Atlantis II Cruise 108, Leg 3

Station 6

15°09'S, 75°41'W

Water Column Depth: 390 m

Bodman and Niskin Casts

(continued)

1 Run on 4/2/81.

2 Run on 4/6/81.

3 No wire out was written on hydro sheet. Accepted depth of 291 m = thermometric depth. Value of 325 m for wire out came from bridge log.

4 Wire out values are reported as written on the hydro sheet. The value of 204 m accepted depth is the thermometric depth of the bottle with 0 m as wire out.

5 Nutrients were drawn from this bottle and labelled 101/200. Unclear whether this refers to 200 m depth.

6 Thermometric depth. See note 4.

7 Thermometric depth. See note 4. Nutrients labelled 102/68.

8 Low values of chlorophylls in surface water correlate with low values of phytoplankton carotenoid pigments as determined by HPLC.

R/V Atlantis II Cruise No. 108, Leg 3

Station 6

15°09'S, 75°41'W

Water Column Depth: 390 m (approx.)

Bodman and Niskin Casts

Date (Local)	Time (Local)	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	°C in situ T ₀	Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ _t	σ _θ	Dissolved Oxygen (mlO ₂ /l)	Nitrate ¹ (Micromoles/liter)	Nitrite ¹ (Micromoles/liter)	Ammonium (micromoles/liter)	Phos- phate	Sili- cate ¹
4/4/81	0900	15°09'S, 75°40'W	106		10L Nis	50	14.67	50	34.830	14.66	25.93	28.13	0.46	26.1	0.47	0.16	2.53	11.8
		75°40'W			30L Nis	100	--	100	--				--					
"	1108	15°08'S, 75°41'W	107		Niskin	298	--		34.809			28.11	0.02	25.0	4.26	0.11	2.80	31.4
"	1234	"	108		10L Nis	258	11.90	236	34.849	11.87	26.52	28.14	0.06	22.4	4.31	0.0	2.72	28.4
"	1341	15°07'S, 75°41'W	109		30L Nis	266		242										
"	1441	15°05'S, 75°41'W	110		Niskin	150	13.22	140	34.953	13.20	26.33	28.23	0.01	14.3	5.92	0.01	2.72	29.0
"	1606	15°08'S, 75°40'W	111		10L Nis	120	13.37	119	34.923	13.35	26.28	28.20	0.02	5.57	5.86	0.03	2.92	32.4
"	1741	15°03'S, 75°45'W	112		Niskin	233	12.36	220	34.868	12.33	26.44	28.16	0.03	18.7	4.59	0.02	2.81	28.5
"	1805	15°02'S, 75°46'W	113		Niskin	105	14.74	--	34.950	14.72	26.01	28.22	0.02	19.0	2.10	0.09	2.66	27.9
"	1951 ²		114		Bodman	5	--		34.848			28.14	4.95	4.85	0.53	--	--	1.15
4/5/81	1032- 1058	15°01'S, 75°31'W	115 ³ 116		30L Nis	50	--	50	34.989	14.03	26.19	28.26	0.21	17.0	2.55	0.0	2.64	30.4
					Niskin	90	14.04	89										
4/7/81	0635	-- ⁴	118		10L Nis	90	14.16	90										
					Niskin	110	14.08	110										

¹Run on 4/6/81.

²Time from hydro sheet. In ship's log casts through 115 ended at 1910, when air sampling at 3 knots began.

³Cast 115 doesn't appear on hydro sheets, but does in bridge log.

⁴Ship stopped at "Sta. 6". No fix in log.

R/V Atlantis II Cruise No. 108, Leg 3

Station 6a

15°03' S, 75°28' W

Water Column Depth: 80 m

Bodman and Niskin Casts

Date (Local)	Time	Lat. S, Long. W	Cast No.	Sample	Bottle Type	Wire Out (m)	°C in situ T _W	Accepted Depth (m)	Salinity ‰	Pot. Temp (°C)	σ _t	σ _θ	Dissolved Oxygen (ml O ₂ /l)	Chloro- phyll (µg/l)	Phaeo- pigments (µg/l)	Nitrate	Nitrite (Micromoles/liter)	Ammonium (Micromoles/liter)	Phos- phate (µg/l)	Silica (µg/l)
4/3/81	1030	15°03'S,	103	34	Bodman	10	--	10	34.965	--	--	28.24	0.98	0.6	0.62	12.2 ¹	1.06 ¹	0.25	2.94	28.1 ¹
"	1205	75°28'W	104		Niskin	0	--		--	--	--	--	--							
					"	10	--		--	--	--	--	--							
					"	20	--		--	--	--	--	--							
					"	30	--		--	--	--	--	--							
	1500	15°02'S,			Niskin	0	--		--	--	--	--	--							
		75°28'W			"	10	--		--	--	--	--	--							
					"	20	--		--	--	--	--	--							
					"	30	--		--	--	--	--	--							

¹ Run on 4/6/81.

SURFACE SURVEY DATA: TABLE 5. WATER COLUMN DEPTH, TEMP., SALINITY, CHL A.
TABLE 6. NUTRIENTS

Surface Survey: Water Column Depth, Temperature, Salinity, Chlorophyll a.

March 19-20, 1981

Date	Time	Sample No.	Water Column Depth (m)	Temp. (°C)	Salinity ‰	Chlorophyll <u>a</u> μ g/l
3/19/81	1515	1	78	15.8	34.946	3.1
	1530	2	82	16.1	34.940	3.4
	1545	3	118	16.6	34.909	6.0
	1600	4	170	16.8	34.885	3.4
	1615	5	195	17.1	34.879	7.7
	1630	6	299	18.0	34.874	11.2
	1645	7	560	18.5	34.881	2.6
	1700	8	1090	18.9	34.889	3.4
	1715	9	590	18.4	34.883	5.1
	1730	10	425	17.9	34.877	9.4
	1745	11	220	17.4	34.878	15.4
	1800	12	180	17.0	34.889	7.7
	1815	13	150	16.3	34.896	.86
	1830	14	117	16.1	34.911	6.9
	1845	15	80	15.5	34.940	3.4
	1900	16	73	15.1	34.953	2.6
	1915	17	80	15.1	34.941	3.4
	1930	18	112	16.2	34.907	1.7
	1945	19	145	16.9	34.884	7.7
	2000	20	185	17.1	34.874	5.1
	2015	21	325	17.8	34.886	5.1
	2030	22	680	18.2	34.892	3.8
	2045	23	900	18.7	34.940	1.7
	2100	24	1195	19.1	34.918	.86
	2115	25	980	18.9	34.908	.86
	2130	26	750	18.2	34.892	1.7
	2145	27	575	17.6	34.888	3.4
	2200	28	350	17.7	34.876	7.7
	2215	29	205	17.4	34.874	5.3
	2230	30	165	16.7	34.884	7.6
	2245	31	135	16.3	34.890	5.3
	2300	32	115	15.8	34.901	7.6
	2315	33	90	15.6	34.919	5.3
	2330	34	118	15.8	34.897	4.4
	2345	35	130	16.5	34.886	7.0

Surface Survey: Water Column Depth, Temperature, Salinity, Chlorophyll a.

(cont.)

Date	Time	Sample No.	Water Column Depth (m)	Temp. (°C)	Salinity ‰	Chlorophyll <u>a</u> µg/l
3/20/81	0000	36	170	16.8	34.869	4.7
	0015	37	255	17.4	34.867	5.3
	0030	38	610	18.0	34.874	2.9
	0045	39	925	18.9	34.903	1.5
	0100	40	1200	19.4	34.924	.59
	0115	41	1080	19.1	34.921	.74
	0130	42	890	18.6	34.897	1.5
	0145	43	600	17.8	34.867	2.6
	0200	44	240	17.4	34.861	4.4
	0215	45	145	16.8	34.877	6.5
	0230	46	130	16.2	34.885	5.9
	0245	47	115	15.7	34.906	3.8
	0300	48	90	15.3	34.922	2.0
	0315	49	115	15.8	34.909	4.4
	0330	50	125	16.3	34.883	5.3
	0345	51	145	17.1	34.863	4.4
	0400	52	285	17.8	34.887	1.0
	0415	53	625	18.6	34.919	.88
	0430	54	1030	19.1	34.945	.29
	0445	55	1110	19.7	34.968	.29
	0500	56	1060	19.2	34.941	.59
	0515	57	880	18.7	34.924	--
	0530	58	620	18.1	34.909	.74
	0545	59	250	17.4	34.865	2.0
	0600	60	150	16.2	34.875	4.4
	0615	61	130	15.9	34.886	2.9
	0630	62	115	15.6	34.898	--
	0645	63	75	15.0	34.955	0
	0700	64	85	15.4	34.926	0
	0715	65	110	15.6	34.901	2.6
	0730	66	140	16.0	34.891	5.9
	0745	67	175	16.3	34.877	5.9
	0800	68	220	16.5	34.884	4.9
	0815	69	205	16.4	34.864	6.2
	0830	70	200	16.6	34.861	6.1
	0845	71	200	17.3	34.891	6.7
	0900	72	195	17.3	34.861	4.5
	0915	73	205	17.4		3.3

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ROW

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Table 6.

Surface Survey (March 19-20, 1981) Nutrients

LOCATION: WATER DEPTH(M): 0 CAST TYPE: BUCKET TCL FILE# 8

ROW #	SAMPLE DESCRIPTION	DEPTH (M)	NITRATE	NITRITE	AMMONIUM	PHOSPHATE	SILICATE
(MICROMOLES/LITER)							
1	1	0	8.35	.71	.11	1.76	12
2	2	0	7.27	.74	.01	1.62	10.7
3	3	0	6.09	.42	.04	1.3	3.04
4	4	0	3.36	.32	.1	.89	1.03
5	5	0	2.4	.24	.11	.73	.42
6	6	0	0	.05	0	.41	.17
7	7	0	0	.06	0	.38	.04
8	8	0	0	.07	0	.31	.04
9	9	0	0	.07	0	.34	.04
10	10	0	0	.05	0	.43	.17
11	11	0	.66	.16	.06	.55	.23
12	12	0	2.69	.31	.21	.8	1.04
13	13	0	6.28	.43	.06	1.21	2.21
14	14	0	6.03	.43	.12	1.29	3.07
15	15	0	8.93	.71	.05	1.77	11
16	16	0	9.75	1.05	.17	2.15	16.9
17	17	0	8.72	.73	0	1.89	11.1
18	18	0	7.32	.44	.13	1.4	3
19	19	0	4.2	.31	.02	.9	.74
20	20	0	2.82	.22	.06	.73	.59
21	21	0	1.37	.16	.18	.51	.23
22	22	0	.49	.1	.03	.37	.19
23	23	0	.45	.13	.02	.34	.19
24	24	0	0	.04	0	.26	.03
25	25	0	.42	.12	.05	.32	.06
26	26	0	1.09	.17	.07	.44	.06
27	27	0	2.9	.23	.1	.59	.27
28	28	0	2.32	.2	.07	.58	.24
29	29	0	3.18	.22	.03	.65	.27
30	30	0	5.89	.28	.1	.97	1.08
31	31	0	8.48	.39	0	1.23	1.69
32	32	0	10.9	.46	.14	1.52	3.52
33	33	0	11.7	.54	.18	1.7	5.92
34	34	0	11.7	.49	.14	1.54	3.85
35	35	0	5.86	.24	0	1.04	1.15
36	36	0	5.63	.21	0	.91	1.28
37	37	0	3.16	.15	0	.64	.36
38	38	0	2.61	.17	.13	.55	.21
39	39	0	.21	.07	0	.32	.08
40	40	0	0	.02	0	.27	.15
41	41	0	.04	.03	0	.28	.15
42	42	0	.72	.12	0	.36	.15
43	43	0	3.38	.23	0	.55	.35
44	44	0	3.9	.17	.11	.67	.4
45	45	0	4.55	.17	.17	.92	1.03
46	46	0	7.32	.25	.04	1.14	2.56
47	47	0	11.1	.47	.1	1.63	6.27
48	48	0	12.8	.68	.17	1.98	10.2
49	49	0	9.76	.4	.03	1.53	5.63
50	50	0	7.94	.28	0	1.16	3.01
51	51	0	5.39	.22	.06	.84	.9
52	52	0	3.34	.28	.04	.56	.69
53	53	0	.56	.1	.04	.34	.26
54	54	0	.19	.01	0	.25	.18
55	55	0	.2	.01	0	.28	.3
56	56	0	.03	.01	0	.23	.2
57	57	0	.26	.05	.05	.3	.3
58	58	0	1.7	.2	.15	.44	.53
59	59	0	5.64	.32	.14	.7	.83
60	60	0	8.44	.31	.03	1.16	3.14
61	61	0	10.6	.41	.52	1.35	4.18
62	62	0	12.7	.52	.39	1.65	6.07
63	63	0	9.03	1.26	.34	2.3	19.8
64	64	0	11.1	.74	.59	1.84	9.78
65	65	0	11.8	.52	.67	1.6	4.69
66	66	0	10.65	.47	.86	1.48	3.13
67	67	0	7.71	.25	.44	1.16	2.13
68	68	0	7.6	.28	.44	1.03	1.85
69	69	0	8.28	.31	.37	1.12	2.38
70	70	0	8.27	.31	.31	1.13	2.7
71	71	0	3.45	.06	0	.74	.88
72	72	0	4.91	.17	.26	.7	1.02
73	73	0	6.15	.27	.35	.79	1.27

SURFACE SURVEY FIGURES: SAMPLING STATIONS, DEPTH, TEMPERATURE, SALINITY,
CHLOROPHYLL A, TOTAL INORGANIC NITROGEN, NITRATE, NITRITE, AMMONIUM, PHOSPHATE,
AND SILICATE

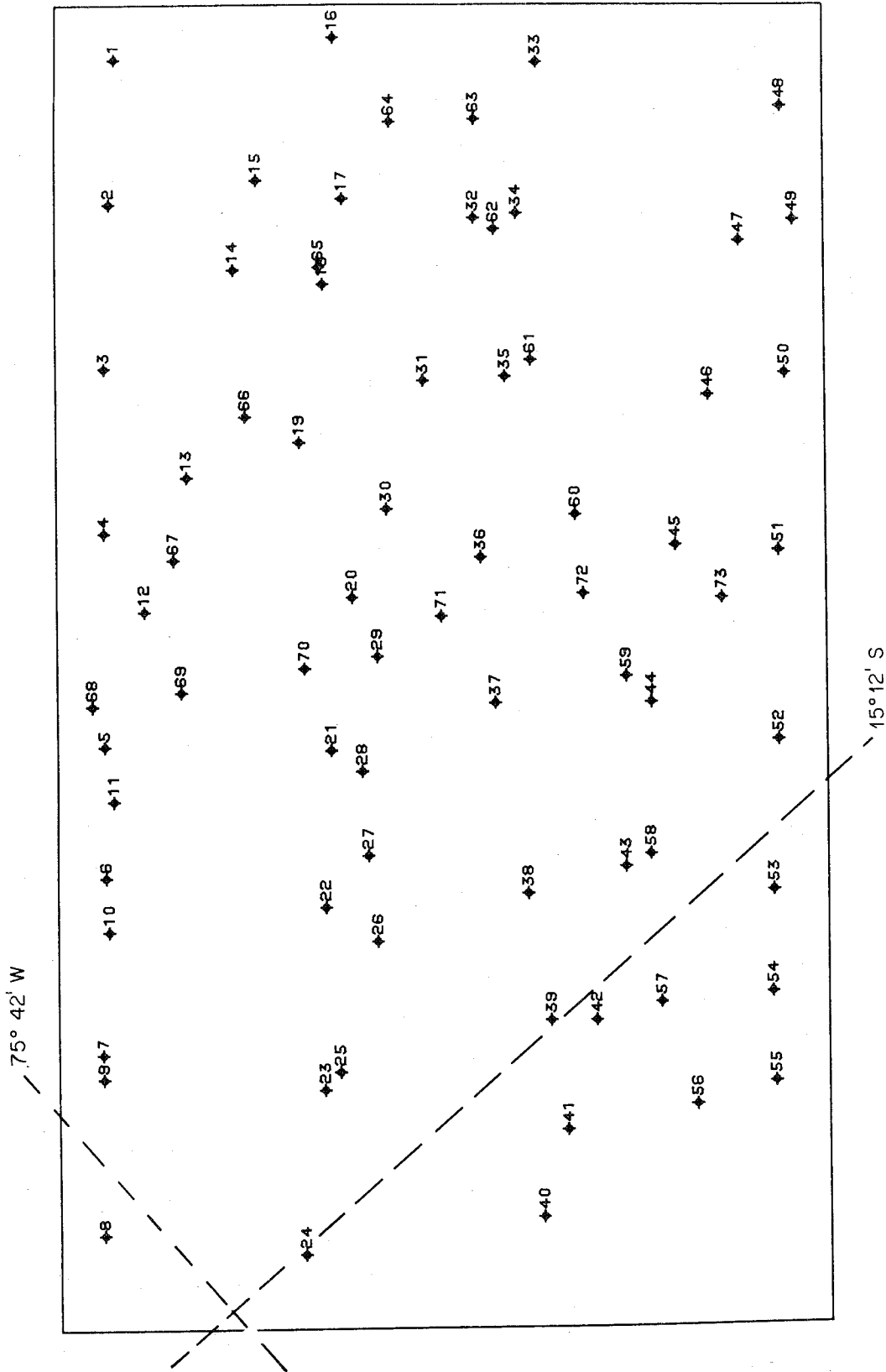


Figure 34. Sampling Stations, Surface Survey (March 19-20, 1981).

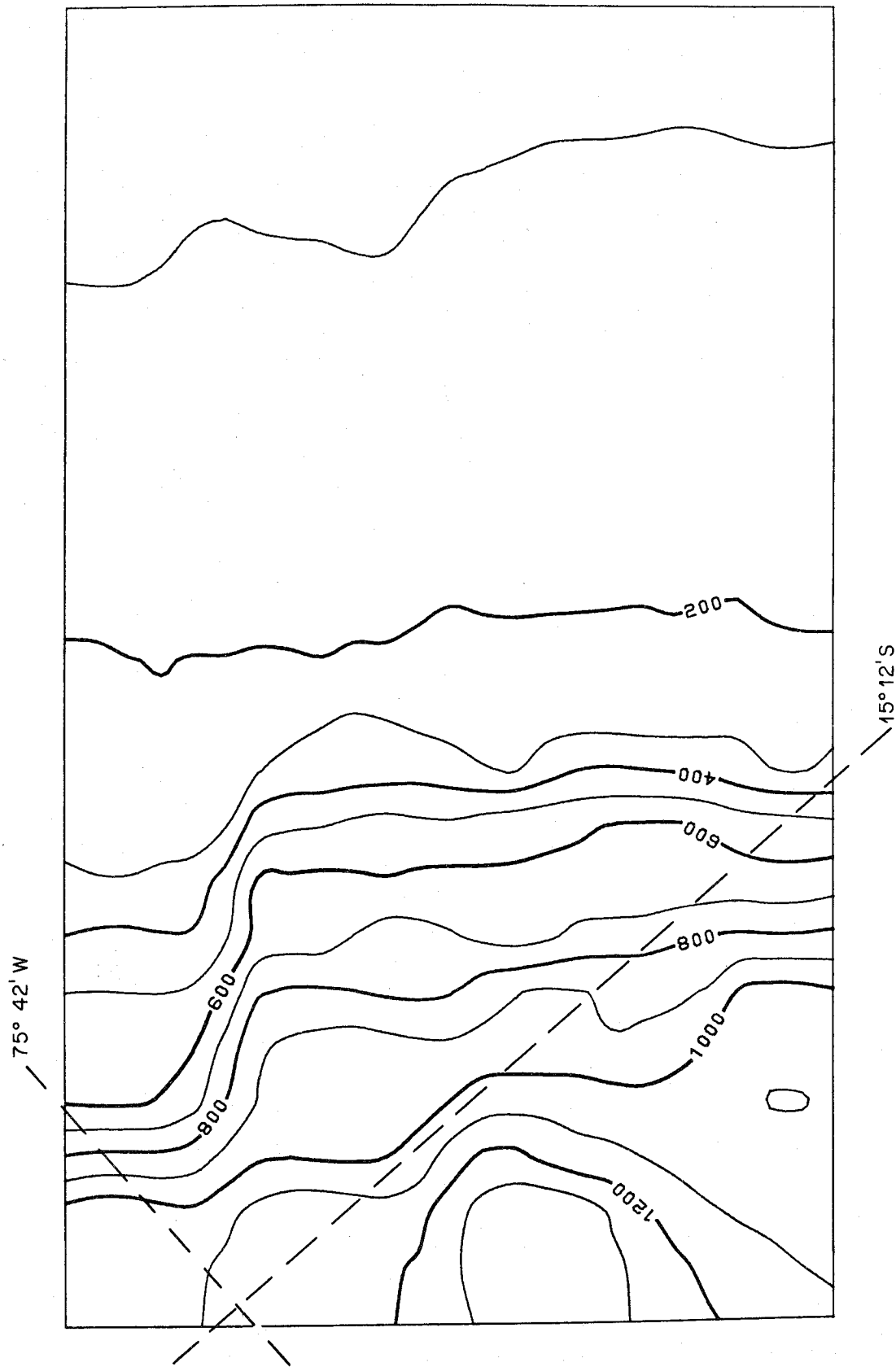


Figure 35. Surface Survey (March 19-20, 1981): Depth (m).

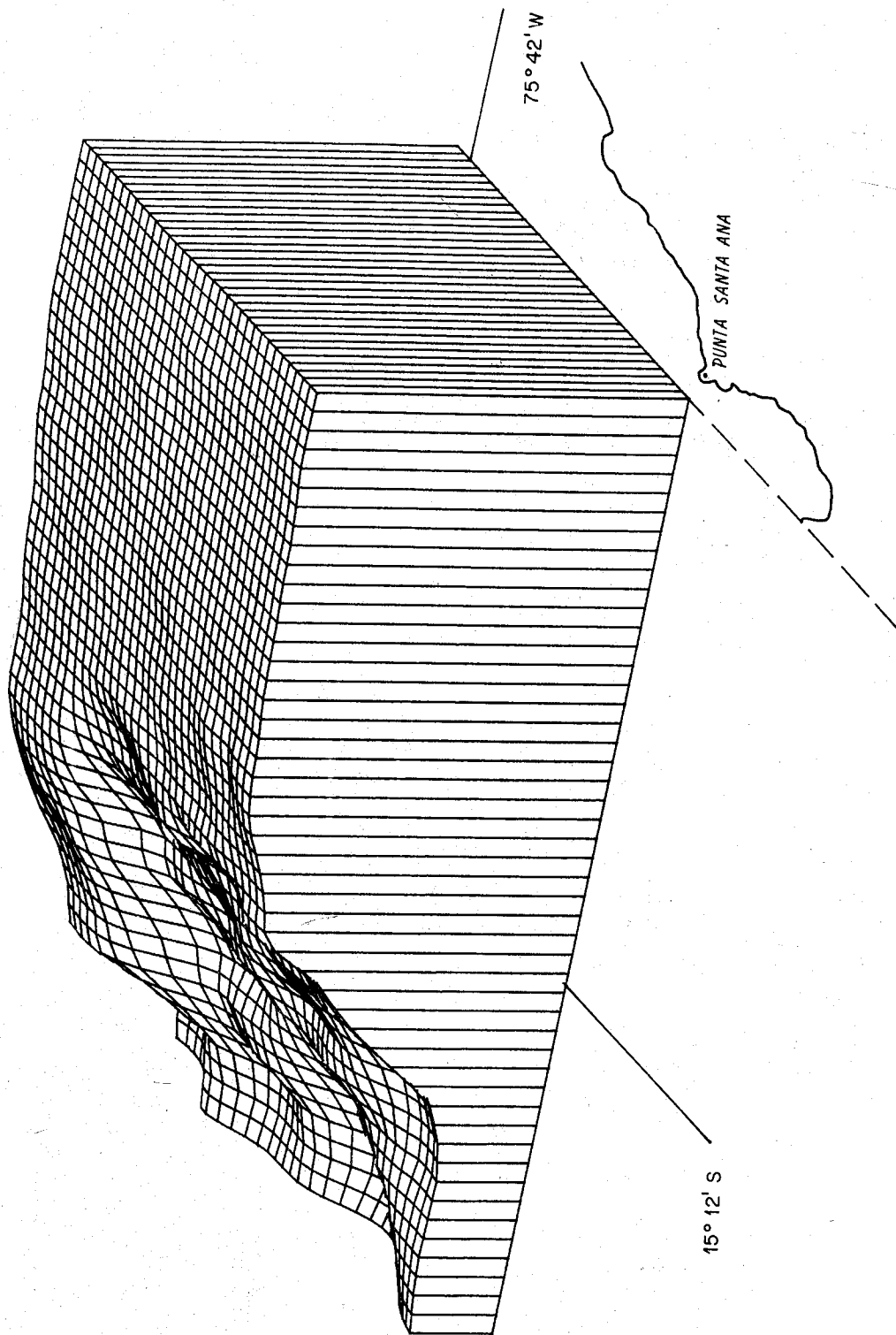


Figure 36. Depth (m). Maximum Depth = 1200 m.

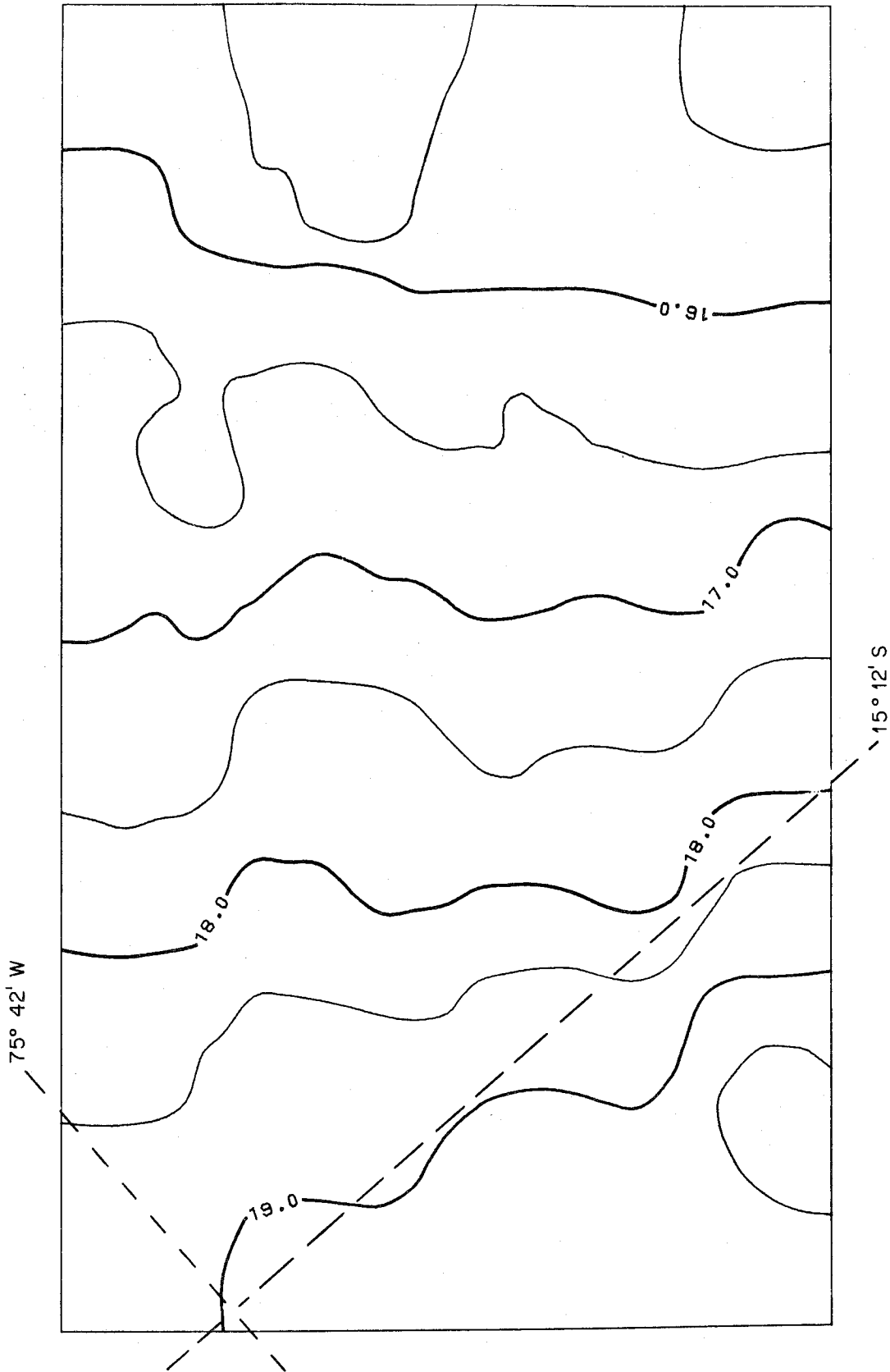


Figure 37. Surface Survey (March 19-20, 1981): Temperature ($^{\circ}\text{C}$).

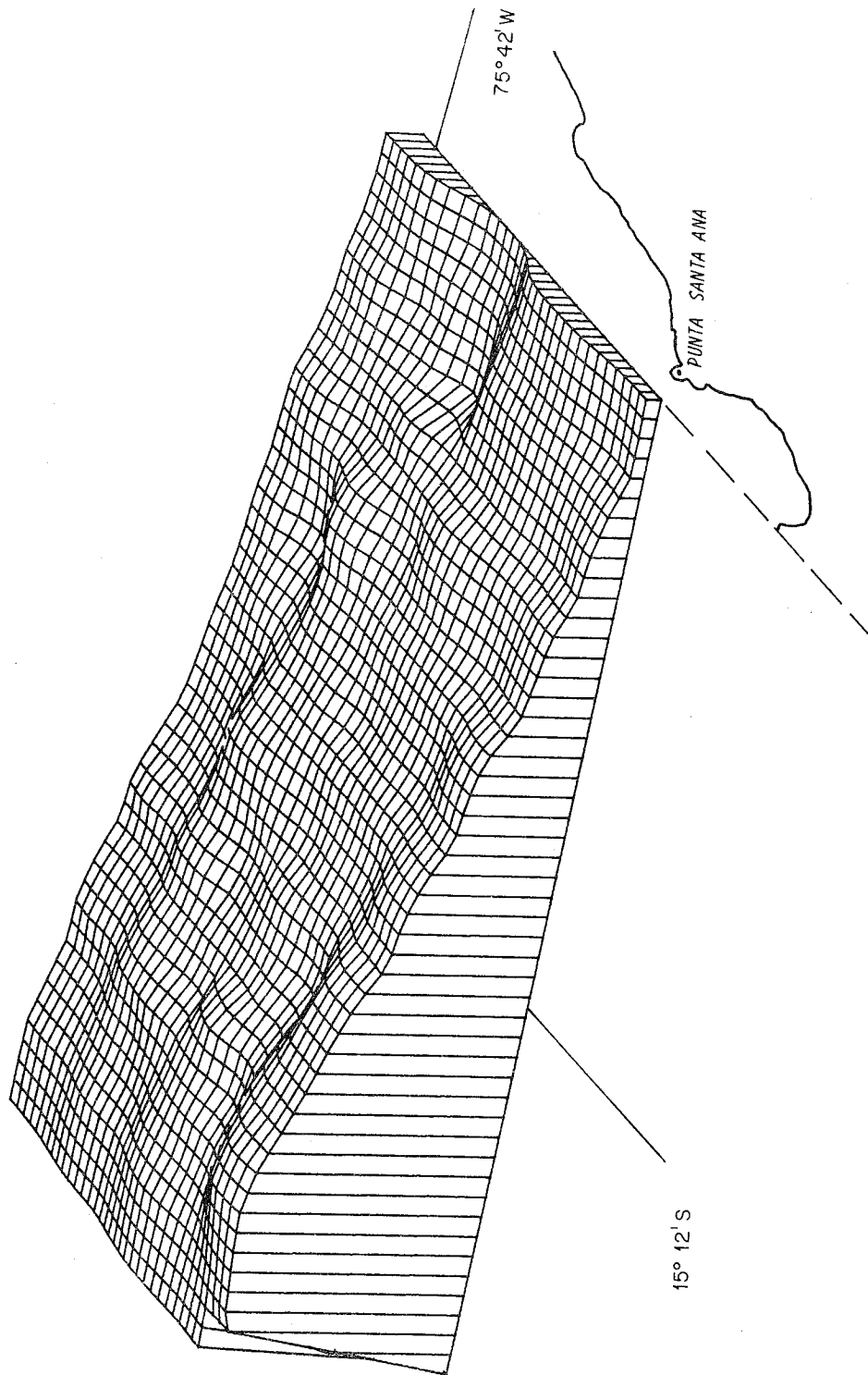


Figure 38. Temperature ($^{\circ}\text{C}$). Maximum Value = 19.7°C .

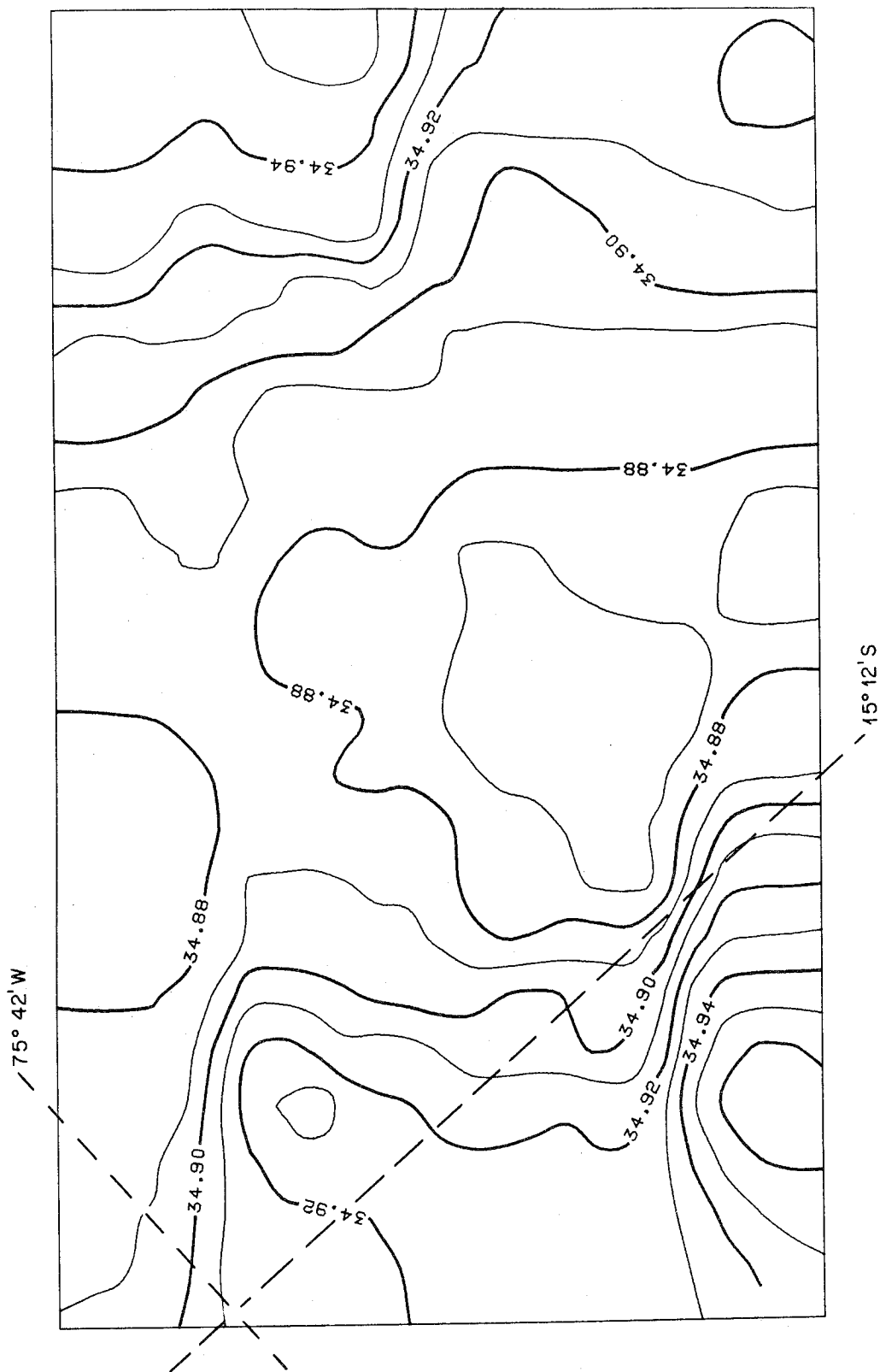


Figure 39. Surface Survey (March 19-20, 1981): Salinity (‰).

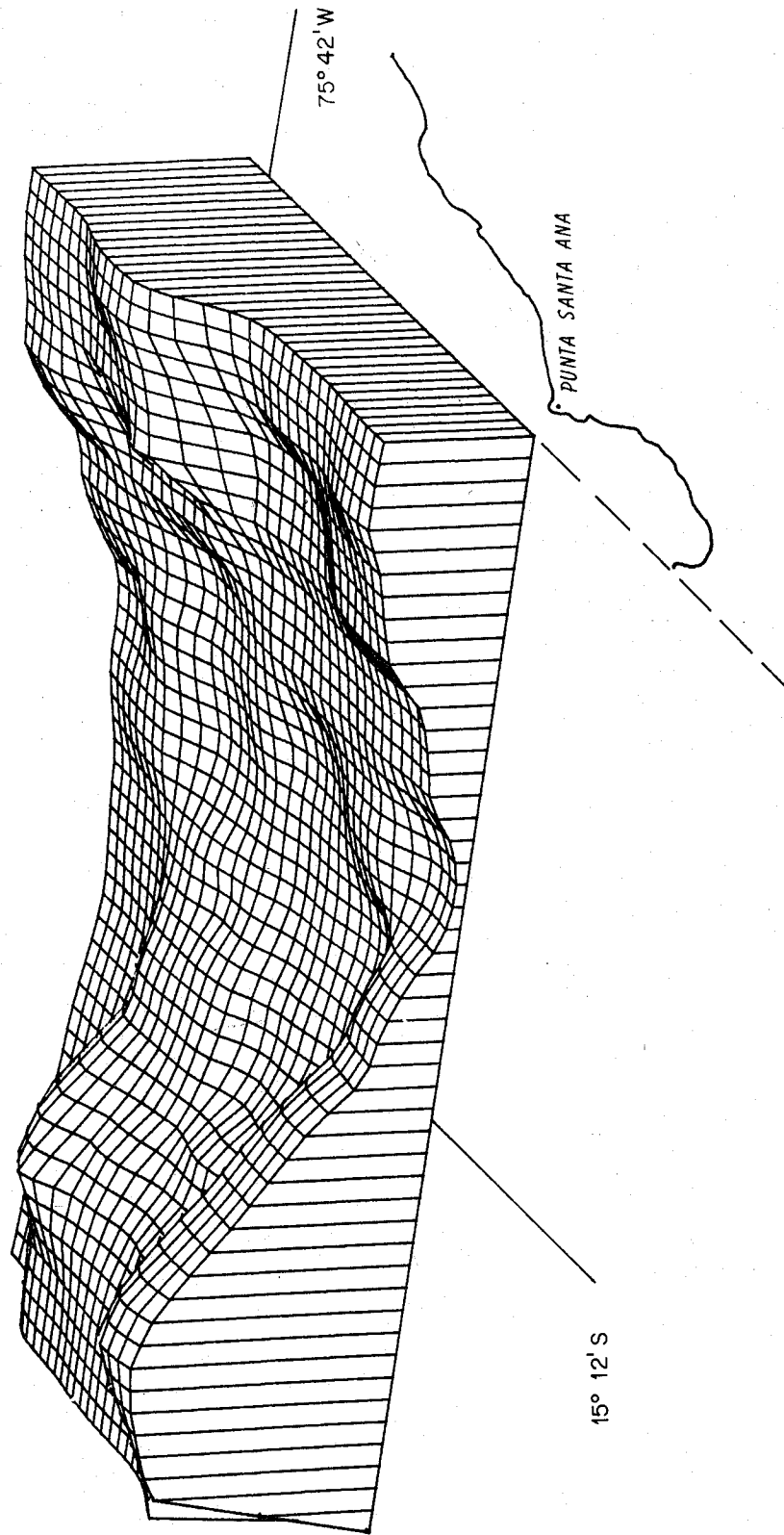


Figure 40. Salinity (‰). Maximum Value = 34.97‰.

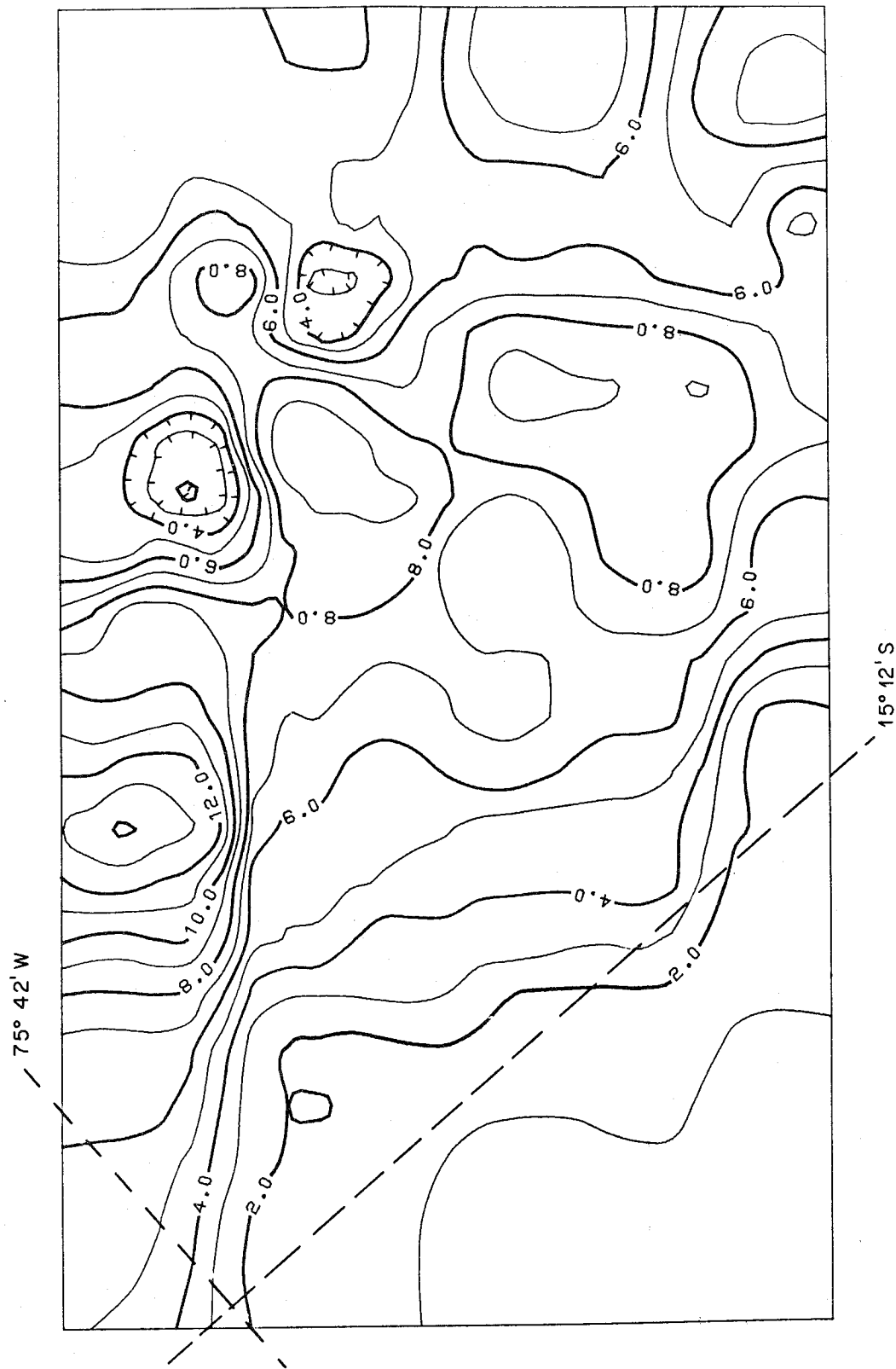


Figure 41. Surface Survey (March 19-20, 1981): Chlorophyll *a* ($\mu\text{g/l}$).

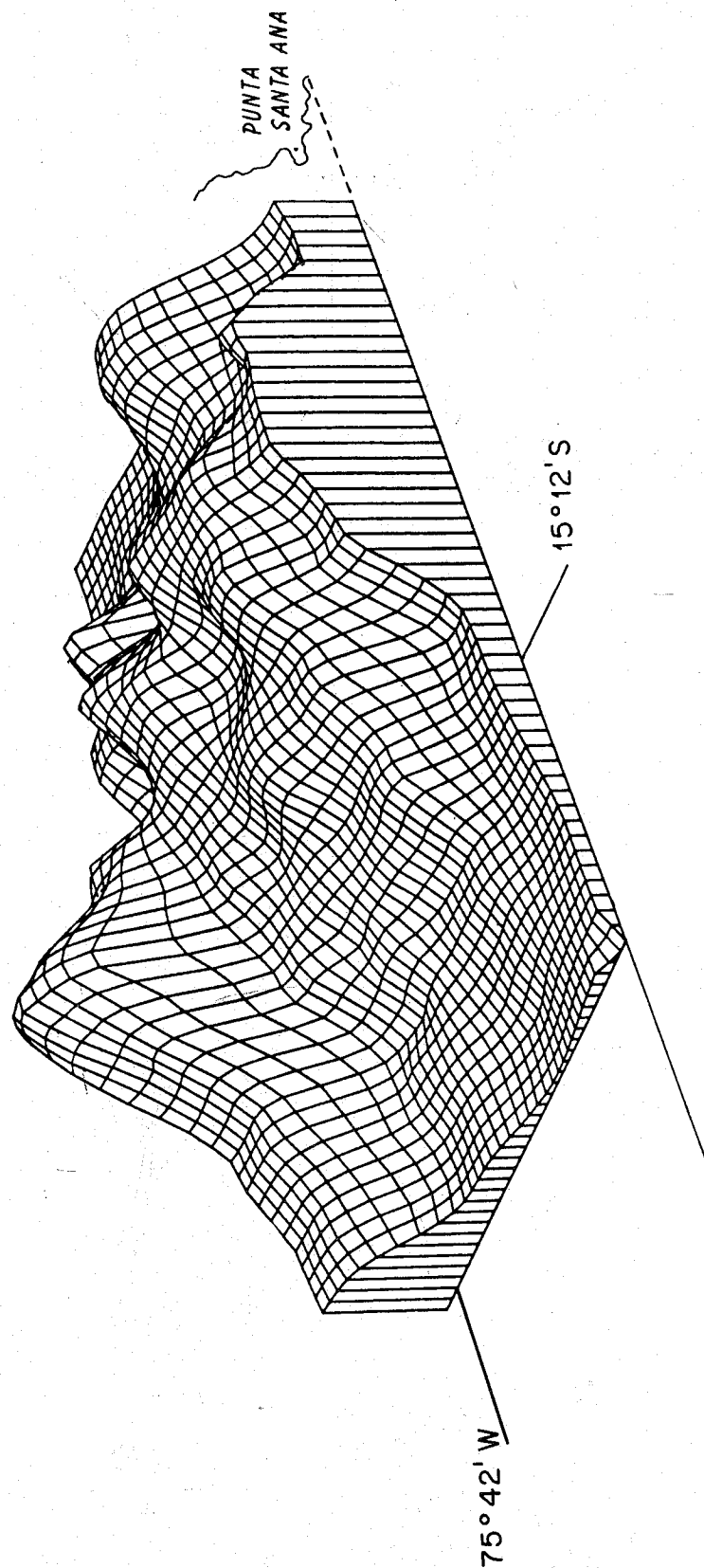


Figure 42. Chlorophyll *a* ($\mu\text{g/l}$). Maximum Value = 15.4 $\mu\text{g/l}$.

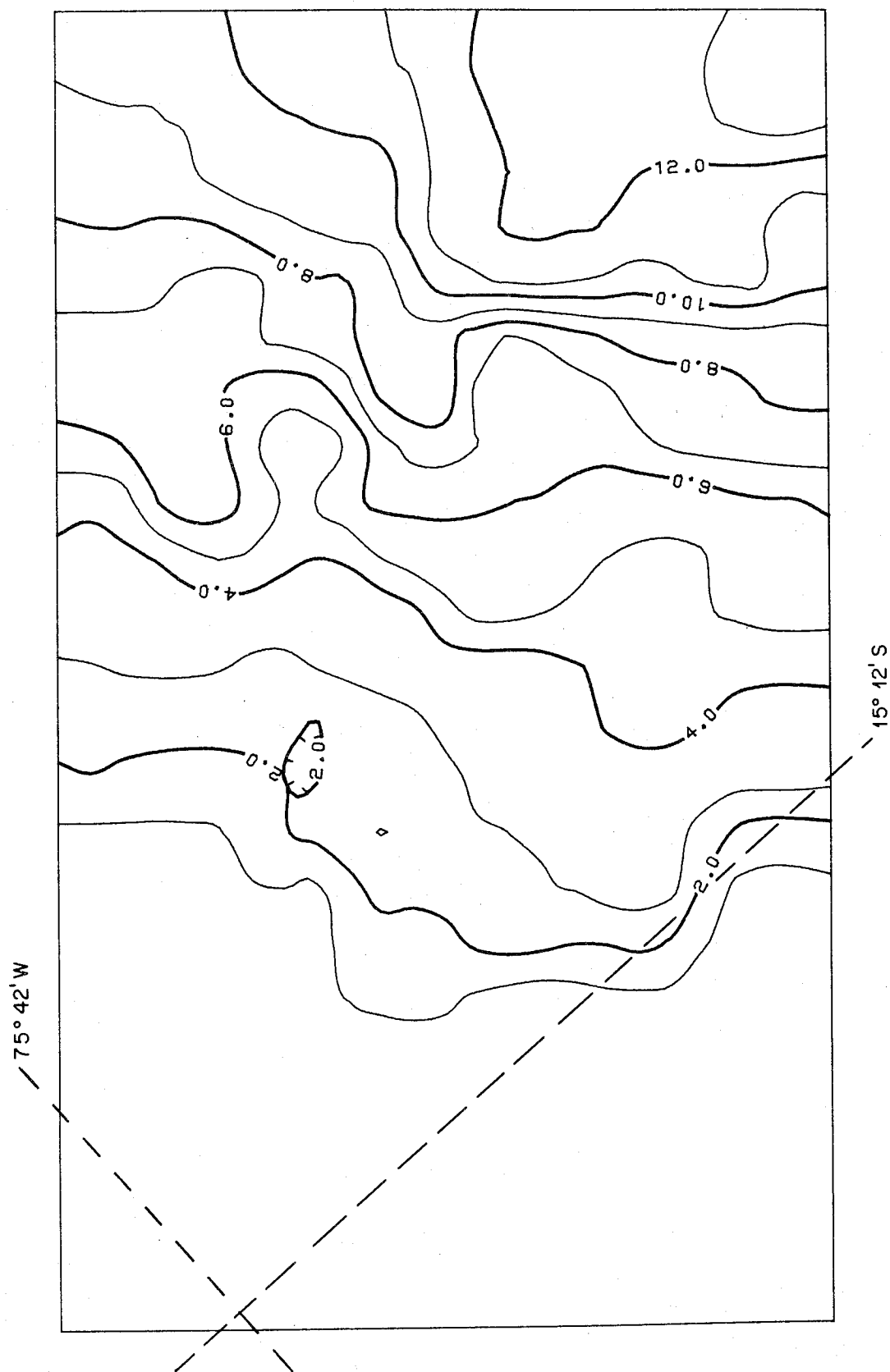


Figure 43. Surface Survey (March 19-20, 1981): Total Inorganic Nitrogen (μM).

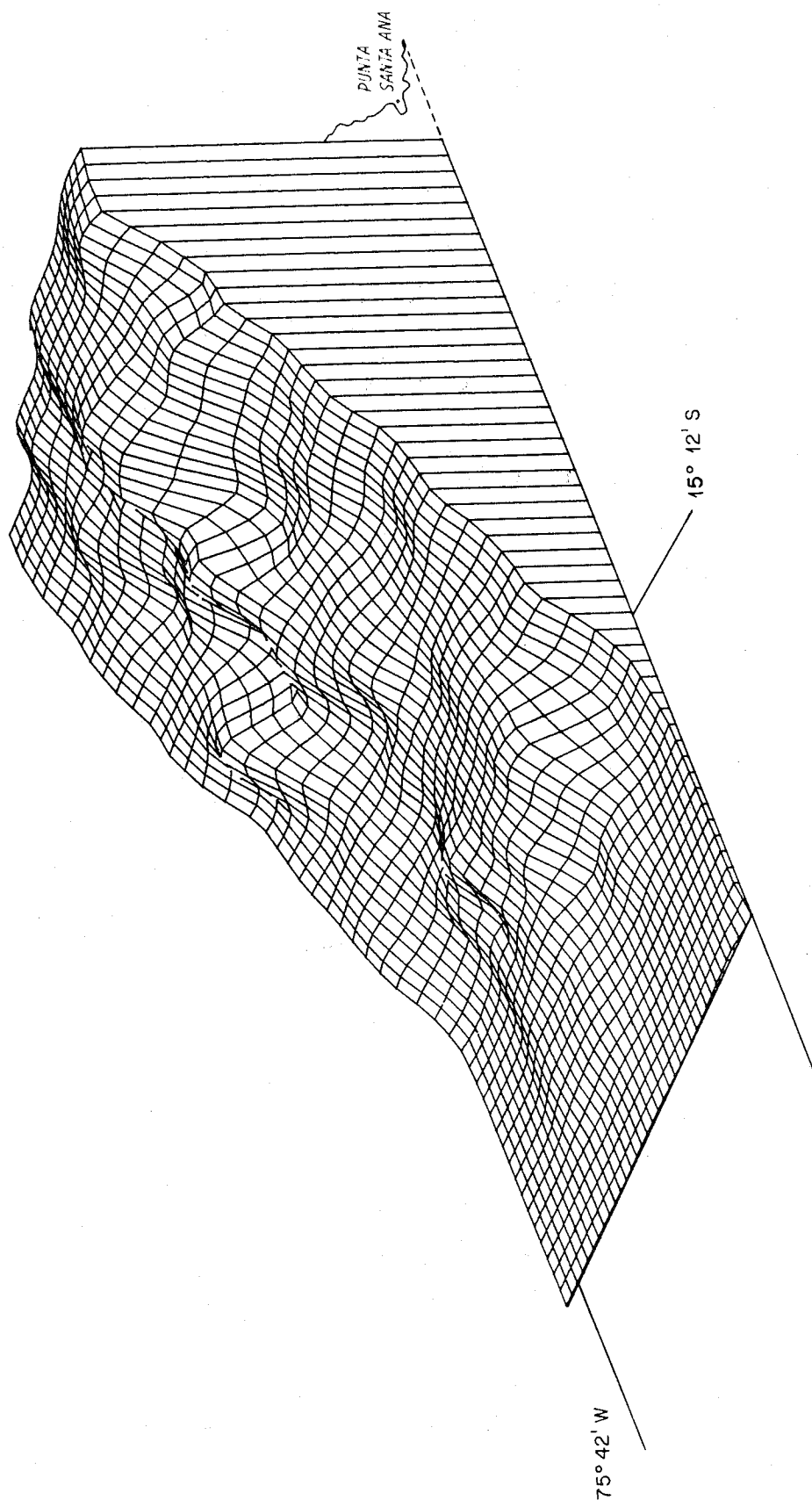


Figure 44. Total Inorganic Nitrogen (μM). Maximum Value = 14.06 μM .

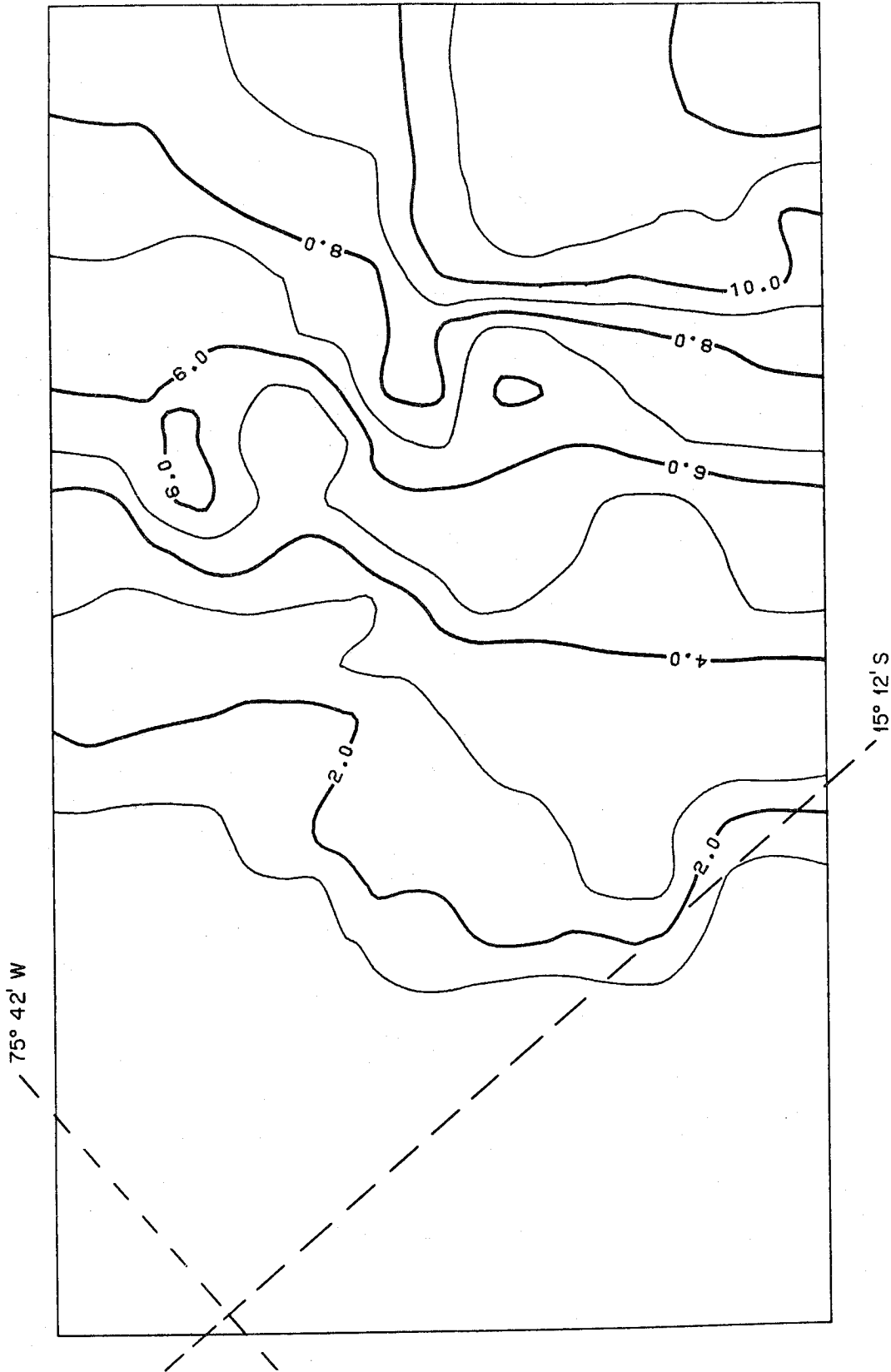


Figure 45. Surface Survey (March 19-20, 1981): Nitrate (μM).

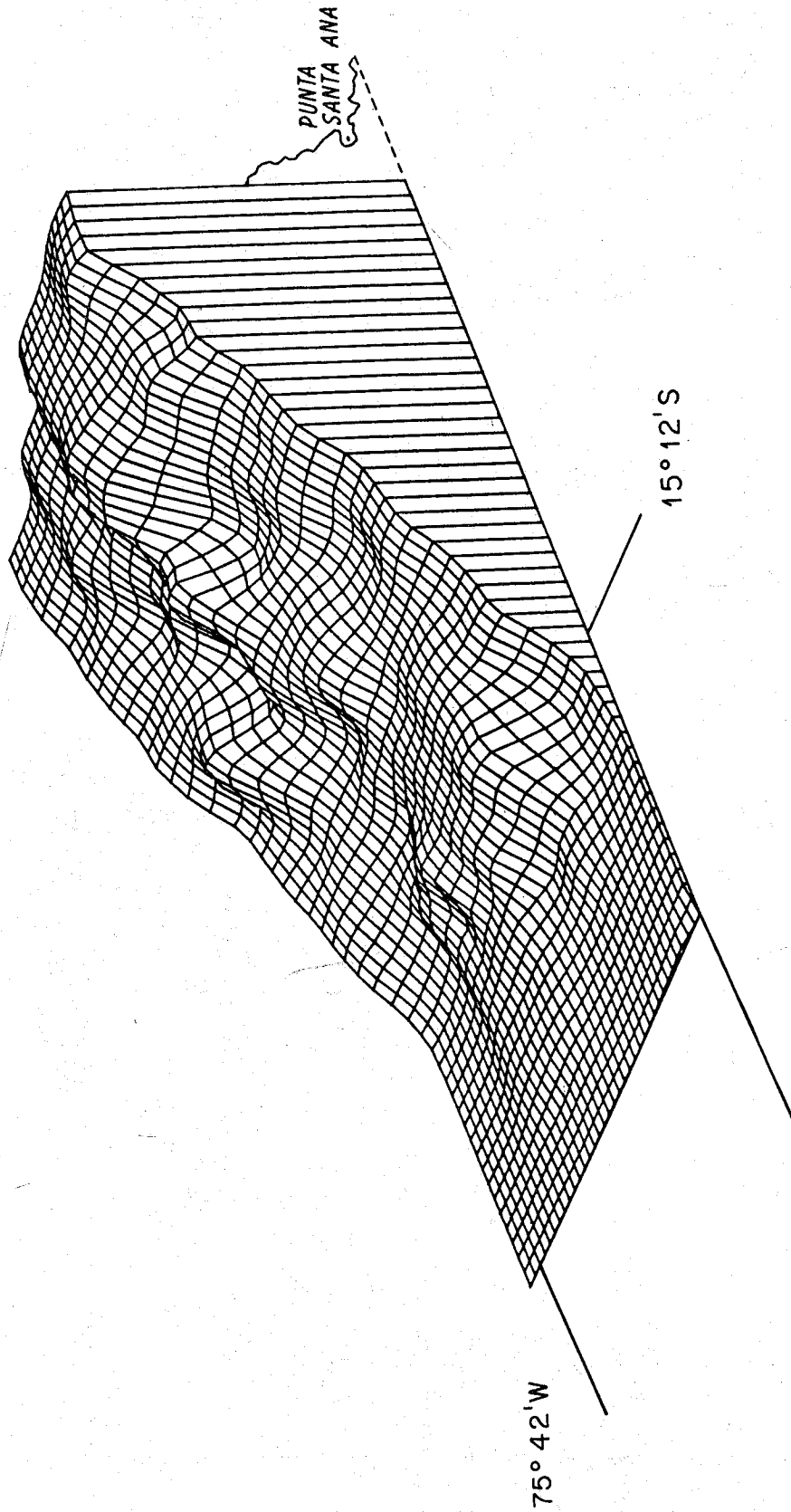


Figure 46. Nitrate (μM). Maximum Value = $12.8 \mu\text{M}$.

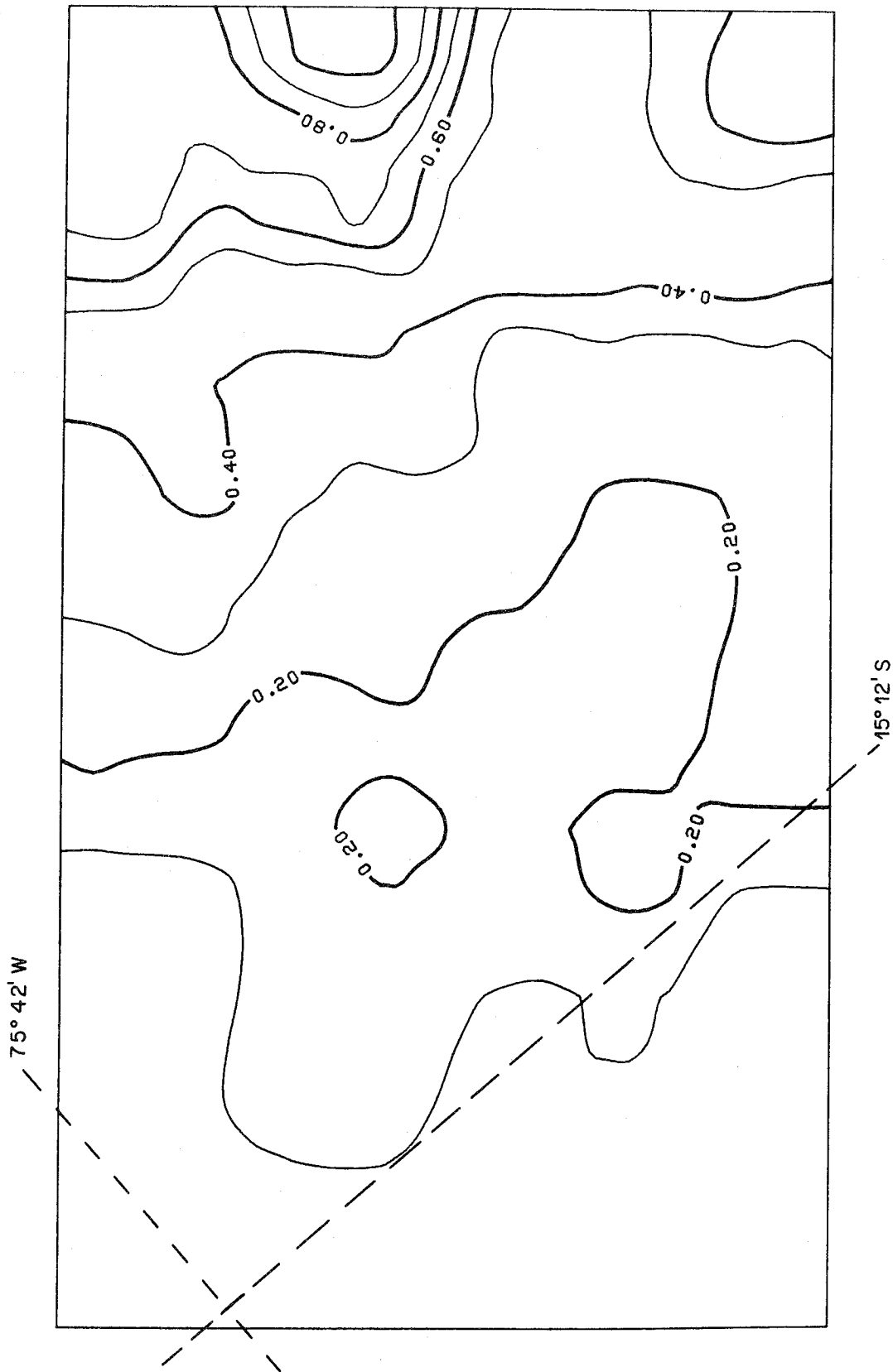


Figure 47. Surface Survey (March 19-20, 1981): Nitrite (μM).

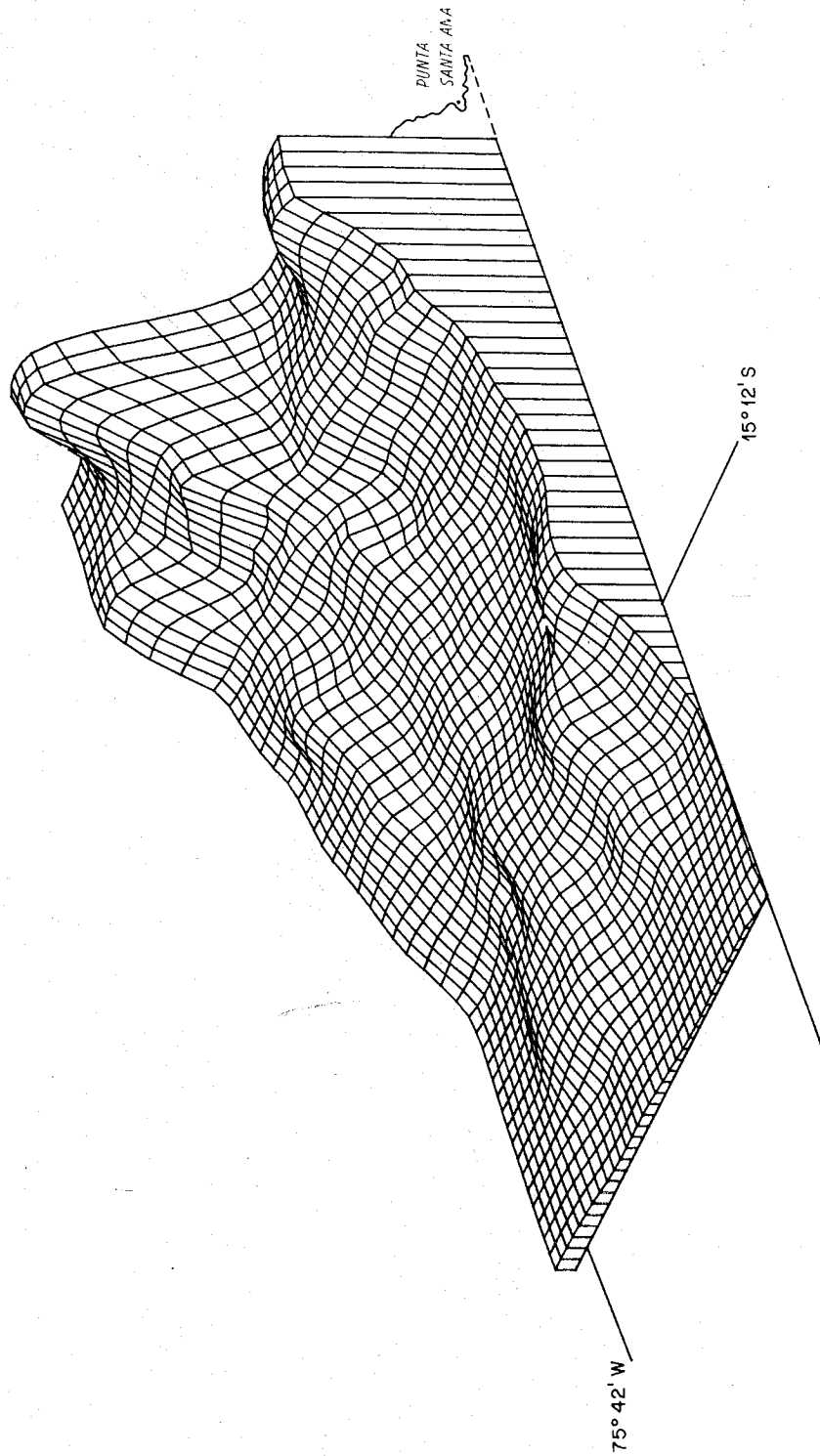


Figure 48. Nitrite (μM). Maximum Value = $1.05 \mu\text{M}$.

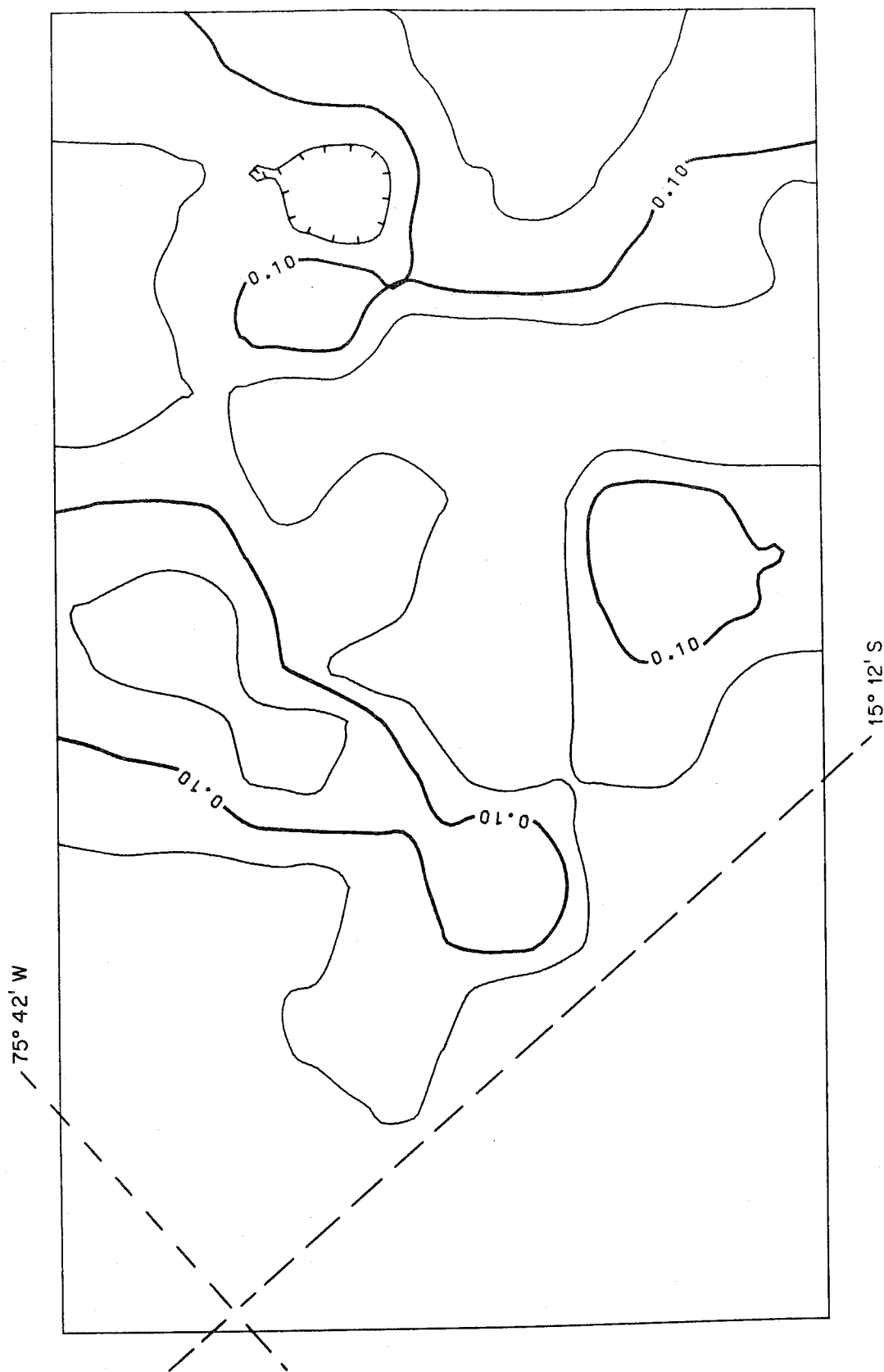


Figure 49. Surface Survey (March 19-20, 1981): Ammonium (μM).

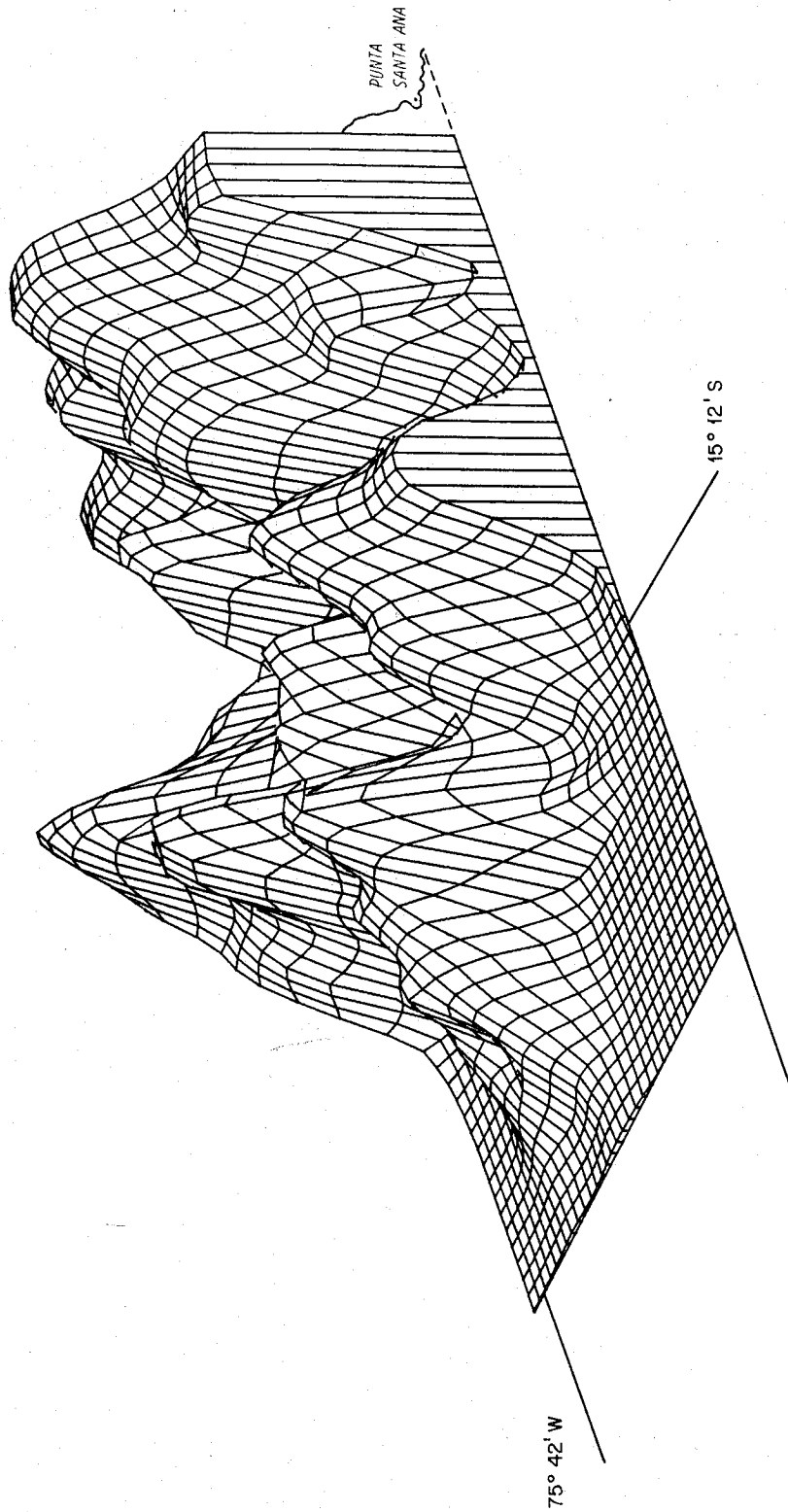


Figure 50. Ammonium (μM). Maximum Value = $0.21 \mu\text{M}$.

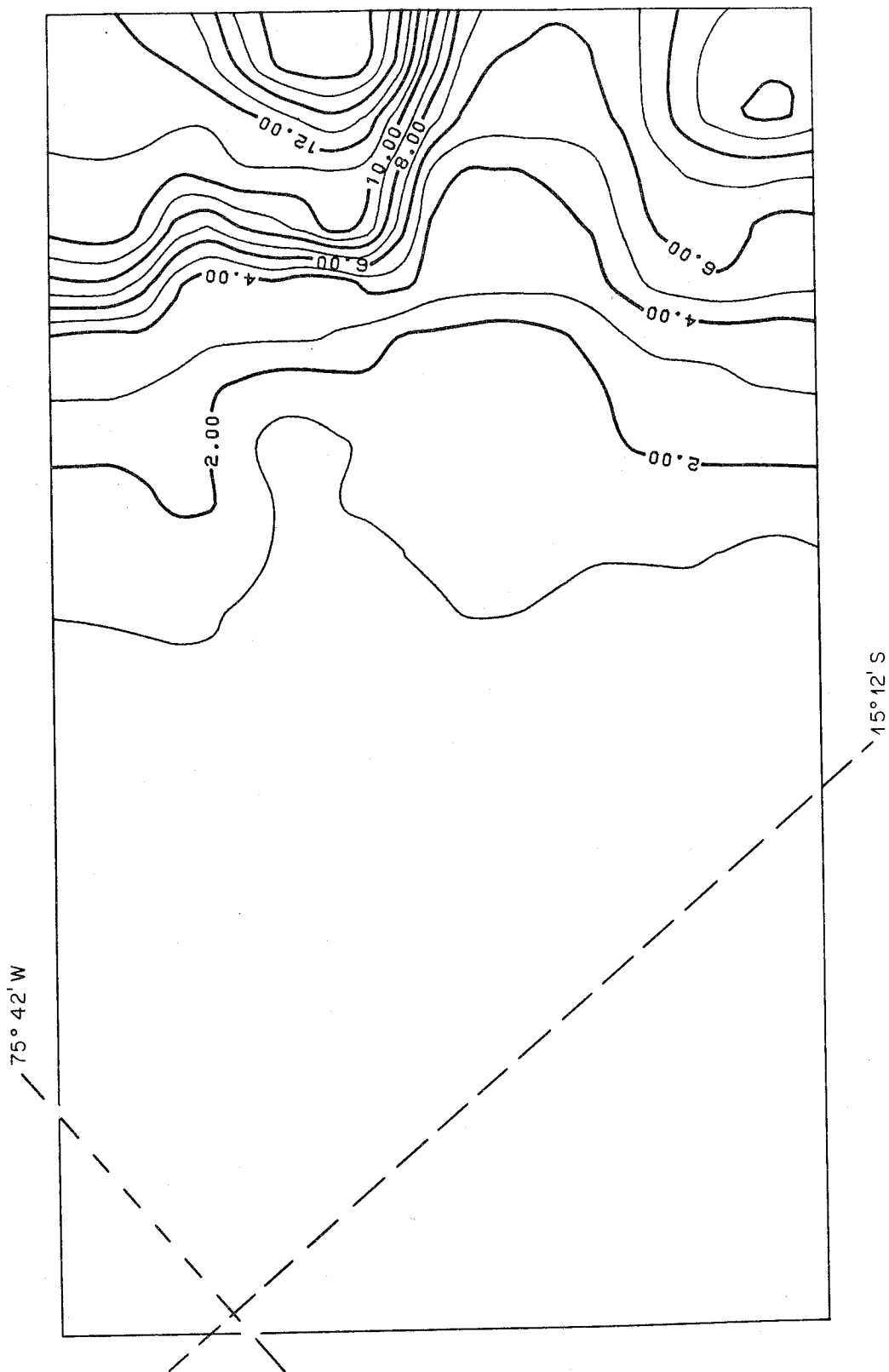


Figure 51. Surface Survey (March 19-20, 1981): Silicate (μM).

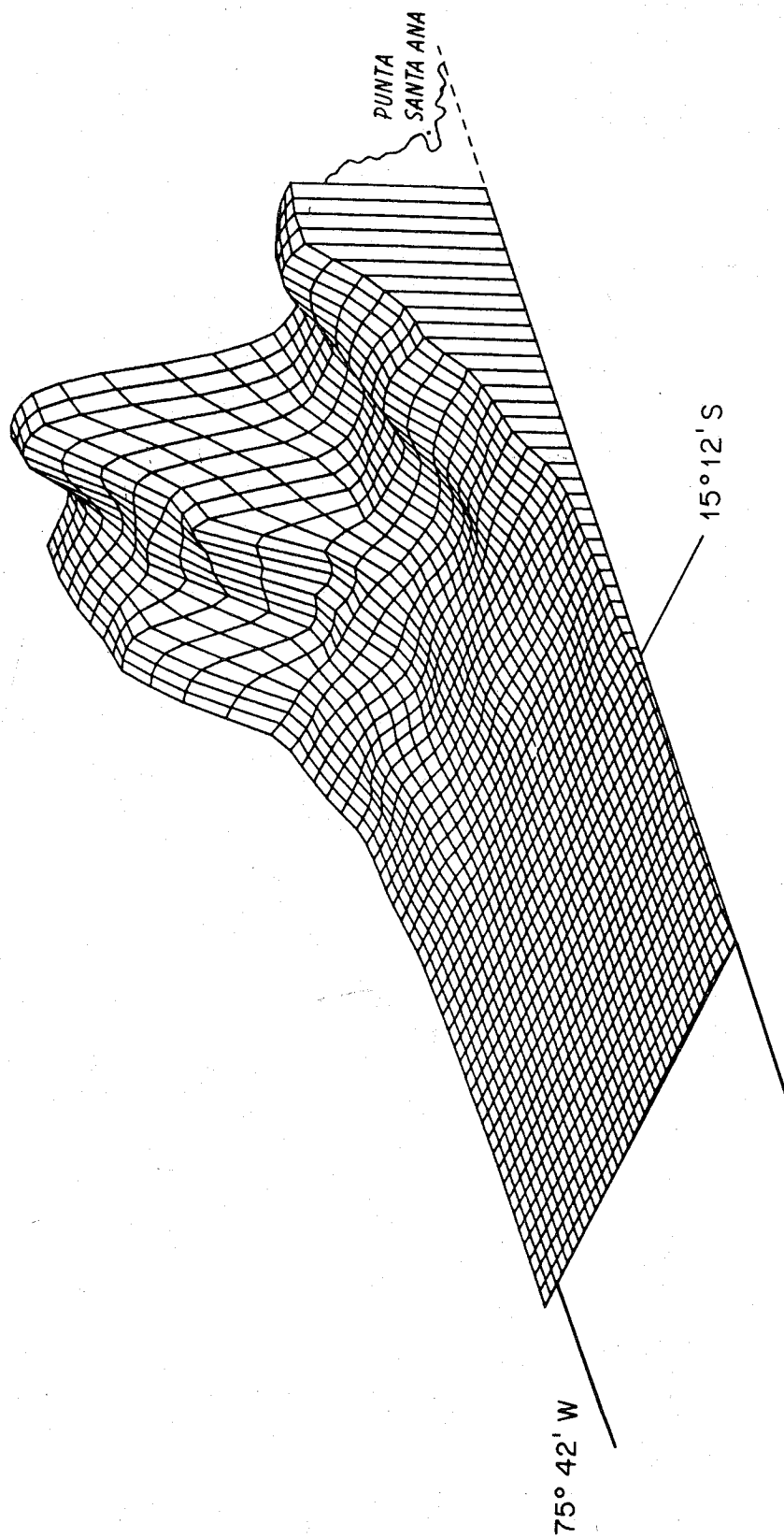


Figure 52. Silicate (μM). Maximum Value = $16.9 \mu\text{M}$.

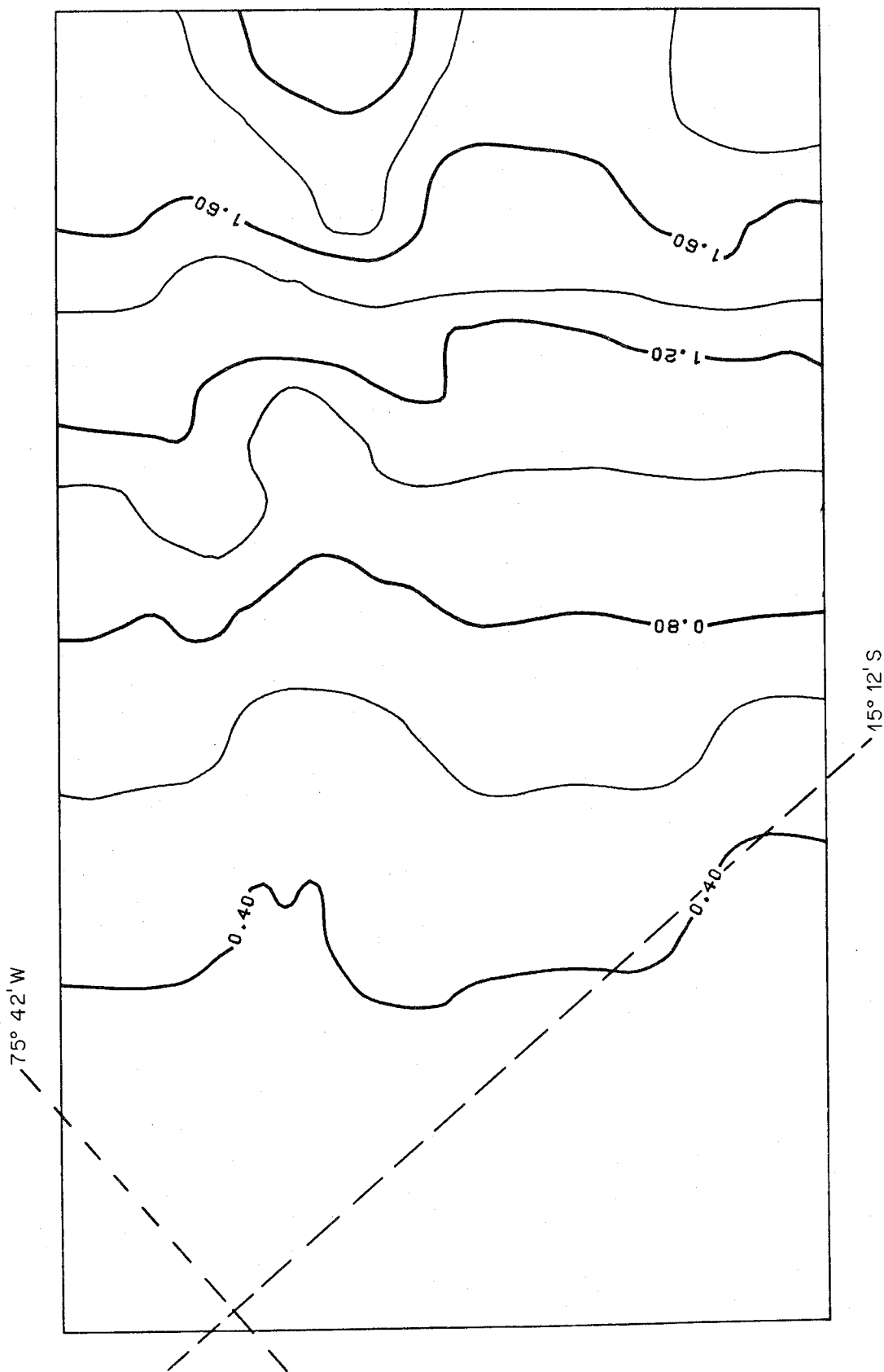


Figure 53. Surface Survey (March 19-20, 1981): Phosphate (μM).

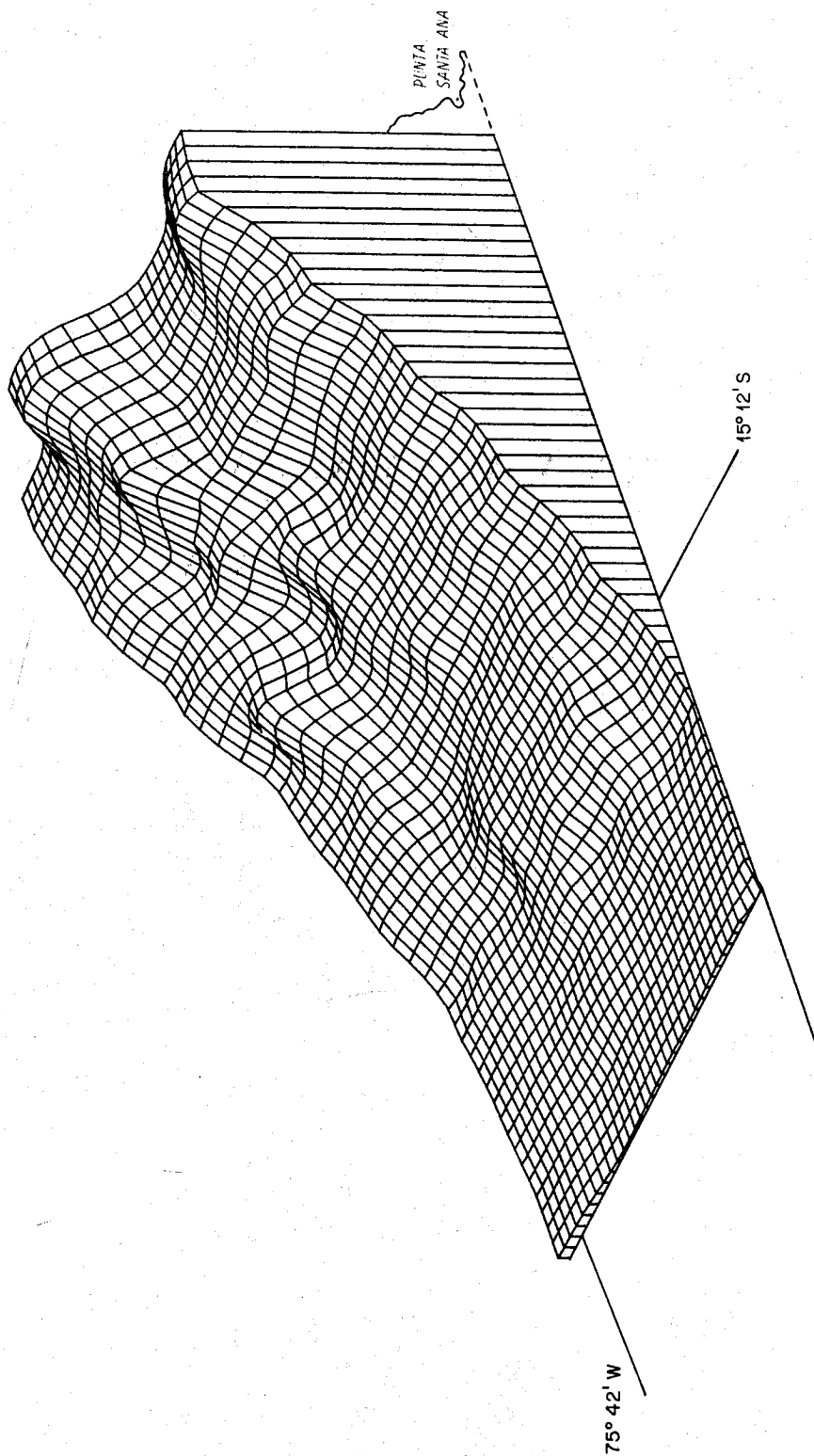


Figure 54. Phosphate (μM). Maximum Value = 2.15 μM .

SERIAL ASCII INSTRUMENTATION LOOP (SAIL) DATA

SEAREX DATA ANALYSIS CENTER
 SEAREX PERU CRUISE
 R/V ATLANTIS-II
 CRUISE NO. 108C
 MARCH 12, 1981 TO APRIL 7, 1981
 SAIL TAPE DATA

SYMBOL:	EQUIVALENT PARAMETER:	MODULE ID:	NAME:	UNITS:	SLOPE:	BIAS:	FILTER:	SAMP INTV:
DATE	DATE	DATE	DAY	DAY	10000E+01	00000E+01	10000E+01	50000E+01
	DATE	DATE	MONTH	MONTHS	10000E+01	00000E+01	10000E+01	50000E+01
	DATE	DATE	YEAR	YEARS	10000E+01	00000E+01	10000E+01	50000E+01
	TIME	TIME	HOUR	HOURS	10000E+01	00000E+01	10000E+01	50000E+01
	TIME	TIME	MINUTE	MINUTES	10000E+01	00000E+01	10000E+01	50000E+01
	TIME	TIME	SECONDS	SECONDS	10000E+01	00000E+01	10000E+01	50000E+01
DEWPOIN	DEWPOINT, LI-CL, TOPLAB	DEWPOINT	DEGREES	CELSIUS	22222E+00	-17778E+02	63000E+00	10000E+01
AIRTEMP	AIR TEMP, G-E RTD, TOP LAB	AIR TEMP	DEGREES	CELSIUS	18000E+00	-40000E+02	63000E+00	10000E+01
APPRNSP	APPRNT WINDSPEED, VA320, FWD	MASTWINDSPEED	KNOTS	REL TO SHIP	23420E+00	00000E+01	10000E+00	10000E+00
APPRWDR	APPRNT WIND DIR, VA320, FWD	MASTWIND DIR	DEGREES	FROM HDG	10811E+01	00000E+01	10000E+00	10000E+00
SEATEMP	SEA TEMP, RDF RTD, BOWDOME	-15'	SEA TEMP	DEGREES CELSIUS	31172E-01	-22412E+02	63000E+00	50000E+01
GYROHED	OSU STEP GYRO REPEATER	GYRO	HOGDEGREES	TRUE	10000E+01	00000E+01	50000E+00	10000E+01
ZULUFIX	SATNAV 706	FIX	ZULUFIX	TIME GMT	10000E+01	00000E+01	10000E+01	50000E+01
DEG, MIN-LAT	SATNAV 706	LAT	DEGR	DEGREES LATITUDE	10000E+01	00000E+01	10000E+01	50000E+01
	SATNAV 706	MINUTES	MINUTES	LATITUDE	10000E+01	00000E+01	10000E+01	50000E+01
	SATNAV 706	DEC	MIN	DECIMAL MIN LAT	10000E-02	00000E+01	10000E+01	50000E+01
DEG, MIN-LNG	SATNAV 706	LNGITUDE	DEGREES	LONG. E/W	10000E+01	00000E+01	10000E+01	50000E+01
	SATNAV 706	MINUTES	MIN. OF	LONGITUDE	10000E+01	00000E+01	10000E+01	50000E+01
	SATNAV 706	DEC	LONG	DECIMAL LONGITUDE	10000E+01	00000E+01	10000E+01	50000E+01
FIX	SATNAV 706	ITER	FIX	ITERATIONS	10000E+01	00000E+01	10000E+01	50000E+01
MANLSPD	MANUAL SPEED LOG REPEATER	MAN	SPD	KNOTS	10000E+00	00000E+01	10000E+01	10000E+01
TRWDSPD	TRUE WIND SPEED & DIRECTION	TR	W	SPDKNOTS	10000E+00	00000E+01	10000E+01	10000E+01
TRWDDIR	TRUE WIND SPEED & DIRECTION	TR	W	DIRDEGREES	10000E+00	00000E+01	10000E+01	10000E+01

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	APPROX	SEATEMP	GYNOCHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/12/81	19: 9: 54	-3 50.253'	81 28.943'	3	22.444	28.580	17.565	368.66	20.508	000	1836.00	000	17.500	8.600
3/12/81	19: 24: 54	-3 50.253'	81 28.943'	3	22.221	28.065	16.466	371.63	20.365	256.790	1836.00	12.000	5.500	298.600
3/12/81	19: 39: 56	-3 50.253'	81 28.943'	3	21.941	27.817	17.126	378.81	19.718	350.510	1836.00	12.000	6.500	41.100
3/12/81	19: 54: 56	-3 50.253'	81 28.943'	3	22.070	27.503	16.815	378.64	20.775	335.870	1836.00	12.000	6.500	27.400
3/12/81	20: 9: 56	-3 50.253'	81 28.943'	3	21.626	27.386	18.021	383.91	22.127	107.640	1836.00	11.800	8.800	164.600
3/12/81	20: 24: 57	-3 50.253'	81 28.943'	3	21.337	26.960	17.415	385.59	23.204	199.510	1836.00	11.800	8.400	263.500
3/12/81	20: 39: 57	-3 50.253'	81 28.943'	3	21.497	26.490	17.199	381.53	22.436	355.710	1836.00	11.800	7.700	50.900
3/12/81	20: 54: 58	-3 50.253'	81 28.943'	3	21.323	26.277	18.068	381.56	21.871	301.370	1836.00	11.800	8.200	355.600
3/12/81	21: 9: 59	-3 50.253'	81 28.943'	3	21.565	26.411	18.100	389.26	22.422	355.880	1836.00	11.800	9.500	63.200
3/12/81	21: 24: 59	-4 17.572'	81 30.569'	3	21.555	26.413	17.634	392.40	23.922	334.290	2052.00	11.800	9.600	48.500
3/12/81	21: 39: 59	-4 17.572'	81 30.569'	3	21.052	26.418	15.643	394.59	24.207	219.240	2052.00	11.800	8.800	301.000
3/12/81	21: 54: 59	-4 17.572'	81 30.569'	3	21.344	26.471	16.002	396.41	23.175	198.840	2052.00	11.800	9.200	285.400
3/12/81	22: 9: 59	-4 17.572'	81 30.569'	3	21.483	26.069	15.951	394.30	23.345	184.740	2052.00	10.700	9.300	260.600
3/12/81	22: 24: 59	-4 17.572'	81 30.569'	3	21.110	25.929	22.824	388.53	24.317	186.450	2052.00	10.700	14.300	236.800
3/12/81	22: 39: 59	-4 17.572'	81 30.569'	3	21.332	25.543	23.229	384.85	24.501	185.490	2052.00	11.000	14.000	229.400
3/12/81	22: 54: 59	-4 17.572'	81 30.569'	3	21.033	25.504	18.321	392.16	24.241	170.800	2052.00	11.000	10.700	236.200
3/12/81	23: 9: 59	-4 37.387'	81 32.696'	3	20.701	25.340	19.467	390.22	24.713	169.490	2238.00	11.000	11.400	227.600
3/12/81	23: 24: 59	-4 37.387'	81 32.696'	3	21.040	25.340	20.550	388.26	24.568	169.610	2238.00	11.000	12.200	223.200
3/12/81	23: 39: 59	-4 37.387'	81 32.696'	3	21.291	25.181	21.782	379.19	25.307	170.370	2238.00	11.000	17.000	207.400
3/12/81	23: 54: 59	-4 37.387'	81 32.696'	3	20.900	25.154	23.469	383.11	25.147	169.820	2238.00	11.100	13.700	210.400
3/12/81	0: 9: 59	-4 49.588'	81 30.788'	3	21.060	24.938	24.253	382.91	24.862	171.680	2344.00	11.000	15.100	200.700
3/13/81	0: 24: 59	-4 49.588'	81 30.788'	3	20.888	24.809	25.368	378.54	25.039	169.880	2344.00	11.000	15.100	200.700
3/13/81	0: 39: 59	-4 49.588'	81 30.788'	3	20.730	24.777	26.359	376.56	24.904	169.310	2344.00	11.000	16.000	197.000
3/13/81	0: 54: 59	-4 49.588'	81 30.788'	3	20.939	24.621	26.798	374.24	25.022	167.950	2344.00	11.000	16.000	190.100
3/13/81	1: 9: 59	-4 49.588'	81 30.788'	3	21.040	24.620	27.418	370.59	24.890	169.130	2344.00	11.000	16.500	186.400
3/13/81	1: 24: 59	-4 49.588'	81 30.788'	3	20.528	24.440	28.117	371.34	25.021	170.300	2344.00	11.000	17.400	188.400
3/13/81	1: 39: 59	-4 49.588'	81 30.788'	3	20.444	24.278	27.857	368.02	24.977	169.290	2344.00	11.000	17.500	182.500
3/13/81	1: 54: 59	-5 9.711'	81 27.154'	3	19.996	24.082	28.161	369.83	24.910	169.510	2344.00	11.000	17.900	187.400
3/13/81	2: 9: 59	-5 9.711'	81 27.154'	3	19.789	23.950	28.050	368.21	24.188	170.030	2344.00	11.000	17.200	183.600
3/13/81	2: 24: 59	-5 9.711'	81 27.154'	3	19.969	23.721	30.707	367.56	24.367	168.330	2344.00	11.000	19.600	180.000
3/13/81	2: 39: 59	-5 9.711'	81 27.154'	3	19.480	23.524	29.641	366.44	24.191	169.130	2344.00	11.000	18.900	179.400
3/13/81	2: 54: 59	-5 9.711'	81 27.154'	3	19.169	23.367	27.203	363.47	24.270	168.270	2344.00	11.000	18.500	176.700
3/13/81	3: 9: 59	-5 22.963'	81 24.874'	3	19.169	23.367	27.203	363.47	24.270	168.270	2344.00	11.000	16.000	173.500
3/13/81	3: 24: 59	-5 22.963'	81 24.874'	3	18.889	23.203	27.065	363.54	23.930	169.730	2344.00	11.000	16.000	174.600
3/13/81	3: 39: 59	-5 28.252'	81 23.909'	2	18.888	23.180	27.454	363.93	22.786	169.930	308.00	11.100	16.000	176.300
3/13/81	3: 54: 59	-5 28.252'	81 23.909'	2	19.018	23.064	27.688	363.73	23.529	169.330	308.00	11.000	16.500	175.600
3/13/81	4: 9: 59	-5 28.252'	81 23.909'	2	18.807	23.042	28.271	374.32	23.642	169.310	308.00	11.000	18.800	199.400
3/13/81	4: 24: 59	-5 28.252'	81 23.909'	2	18.940	23.000	30.154	409.92	23.764	169.700	308.00	11.000	20.600	210.200
3/13/81	4: 39: 59	-5 28.252'	81 23.909'	2	19.251	22.869	30.130	406.82	23.952	169.740	308.00	11.100	26.700	256.800
3/13/81	4: 54: 59	-5 42.214'	81 21.491'	5	18.920	22.469	30.624	358.14	24.073	169.160	424.00	11.000	19.900	166.000
3/13/81	5: 9: 59	-5 47.797'	81 20.689'	4	18.888	22.347	28.222	357.34	23.844	170.730	424.00	11.000	19.800	167.600
3/13/81	5: 24: 59	-5 47.797'	81 20.689'	4	18.656	22.145	28.467	354.01	22.967	169.980	452.00	11.000	17.300	165.200
3/13/81	5: 39: 59	-5 47.797'	81 20.689'	4	18.656	21.749	25.664	354.47	22.480	169.750	452.00	11.000	15.900	160.400
3/13/81	5: 54: 59	-5 47.797'	81 20.689'	4	18.445	21.445	24.734	349.72	22.719	170.010	452.00	11.000	15.900	160.400
3/13/81	6: 9: 59	-5 47.797'	81 20.689'	4	18.219	21.047	23.930	347.53	21.233	168.180	452.00	11.000	13.300	145.700
3/13/81	6: 24: 59	-5 47.797'	81 20.689'	4	18.277	21.200	23.240	351.20	20.707	157.090	606.00	11.100	12.600	141.200
3/13/81	6: 39: 59	-6 2.013'	81 18.939'	3	18.222	21.021	20.690	352.07	20.533	156.450	606.00	11.000	9.900	140.200
3/13/81	6: 54: 59	-6 2.013'	81 18.939'	3	18.433	21.063	20.078	352.87	21.016	158.110	606.00	11.000	9.100	140.900
3/13/81	7: 9: 59	-6 2.013'	81 18.939'	3	18.666	21.355	21.271	357.59	21.431	159.010	606.00	11.000	10.500	153.400
3/13/81	7: 24: 59	-6 2.013'	81 18.939'	3	18.887	21.672	24.641	355.48	21.008	157.830	606.00	11.000	13.500	149.900
3/13/81	7: 39: 59	-6 2.013'	81 18.939'	3	19.270	21.740	25.319	355.21	21.251	157.080	606.00	11.000	14.100	148.400
3/13/81	7: 54: 59	-6 2.013'	81 18.939'	3	19.162	21.740	25.262	352.59	21.886	160.350	606.00	11.000	14.900	147.400
3/13/81	8: 9: 59	-6 21.712'	81 11.855'	2	19.111	21.740	25.431	354.93	21.702	159.450	756.00	11.000	14.400	150.400
3/13/81	8: 24: 59	-6 21.712'	81 11.855'	2	19.084	21.740	25.411	353.09	21.844	157.380	756.00	11.000	15.100	145.900
3/13/81	8: 39: 59	-6 27.238'	81 9.536'	5	19.081	21.740	25.253	352.91	22.065	156.440	826.00	11.000	14.200	143.600
3/13/81	8: 54: 59	-6 27.238'	81 9.536'	5	19.118	21.627	24.388	349.98	21.884	155.750	826.00	11.000	13.800	137.200
3/13/81	9: 9: 59	-6 27.238'	81 9.536'	5	19.384	21.722	23.684	350.24	22.018	157.880	826.00	11.000	13.100	140.100
3/13/81	9: 25: 1	-6 27.238'	81 9.536'	5	19.111	21.605	23.250	351.70	22.169	158.700	826.00	11.000	12.900	142.800
3/13/81	9: 40: 1	-6 27.238'	81 9.536'	5	18.900	21.560	23.712	352.52	22.004	156.680	826.00	11.000	12.100	142.000
3/13/81	9: 55: 1	-6 27.238'	81 9.536'	5	18.900	21.560	23.712	352.52	22.004	156.680	826.00	11.000	12.100	142.000

3/13/81	10:10:	1	-6 27.238'	81	9.535'	5	19.103	21.560	22.707	352.80	21.990	156.670	826.00	11.000	12.900	142.300
3/13/81	10:25:	1	-6 27.238'	81	9.535'	5	18.947	21.380	25.130	353.06	21.624	157.970	826.00	11.000	14.100	146.000
3/13/81	10:40:	1	-6 45.401'	81	1.676'	3	19.110	21.557	24.768	351.73	21.490	157.080	1010.00	11.000	13.800	141.700
3/13/81	11:10:	1	-6 45.401'	81	1.676'	3	19.111	21.718	25.933	350.56	21.946	158.570	1010.00	11.000	14.800	141.500
3/13/81	11:25:	1	-6 45.401'	81	1.676'	3	19.021	21.740	25.739	348.27	22.022	159.210	1010.00	11.000	14.900	137.300
3/13/81	11:40:	1	-6 57.023'	80	57.340'	3	19.122	21.895	25.505	350.93	22.033	157.210	1118.00	11.000	15.100	141.700
3/13/81	11:55:	1	-6 57.023'	80	57.340'	3	19.484	21.875	24.874	351.07	22.293	148.370	1118.00	11.000	14.600	133.000
3/13/81	12:10:	1	-6 57.023'	80	57.340'	3	19.472	21.917	23.514	353.49	22.203	148.680	1118.00	11.000	12.400	135.400
3/13/81	12:25:	1	-6 57.023'	80	57.340'	3	19.778	21.918	23.641	353.91	22.063	148.460	1118.00	11.000	12.800	137.100
3/13/81	12:40:	1	-6 57.023'	80	57.340'	3	19.777	21.920	23.335	355.72	22.333	147.330	1118.00	11.000	12.700	139.300
3/13/81	12:55:	1	-6 57.023'	80	57.340'	3	19.769	22.055	24.331	361.12	22.267	144.290	1118.00	11.000	12.600	146.100
3/13/81	13:10:	1	-6 57.023'	80	57.340'	3	19.348	22.052	3.411	475.03	21.914	62.748	1118.00	11.000	13.000	227.800
3/13/81	13:25:	1	-7 13.991'	80	48.112'	3	19.553	21.920	3.080	479.65	21.855	62.372	1302.00	11.000	12.900	231.100
3/13/81	13:40:	1	-7 13.991'	80	48.112'	3	19.334	22.083	3.905	439.46	21.850	69.480	1302.00	11.000	10.800	243.900

C ARRIVAL ON STATION TIME 13:49GMT TEST STATOPN

3/13/81	13:55:	2	-7 13.991'	80	48.112'	3	19.743	22.279	9.714	391.00	21.827	93.921	1302.00	11.100	5.600	214.300
3/13/81	14:10:	3	-7 13.991'	80	48.112'	3	19.333	22.100	1.813	481.84	21.859	68.076	1302.00	11.000	11.900	240.300
3/13/81	14:25:	3	-7 13.991'	80	48.112'	3	19.332	22.232	2.549	483.18	21.859	61.166	1302.00	11.100	12.700	231.100
3/13/81	14:40:	3	-7 13.782'	80	48.193'	2	19.415	22.163	4.870	488.76	21.813	54.342	1412.00	200	4.400	180.000
3/13/81	14:55:	3	-7 13.782'	80	48.193'	2	19.774	22.280	3.655	482.28	21.870	55.649	1412.00	200	3.300	180.900
3/13/81	15:10:	3	-7 13.354'	80	48.180'	8	19.153	22.280	1.003	98.27	21.907	42.673	1450.00	200	1.000	135.900
3/13/81	15:25:	3	-7 13.354'	80	48.180'	8	19.258	22.280	1.830	117.62	21.988	70.948	1450.00	200	1.400	194.600
3/13/81	15:40:	3	-7 13.354'	80	48.180'	8	19.333	22.459	1.116	93.59	21.958	65.906	1450.00	200	1.200	168.100
3/13/81	15:55:	3	-7 13.354'	80	48.180'	8	19.415	22.753	1.097	419.11	21.990	71.288	1450.00	200	1.100	139.200
3/13/81	16:10:	3	-7 13.354'	80	48.180'	8	20.030	23.037	1.388	447.92	22.110	60.728	1450.00	200	2.400	176.400
3/13/81	16:25:	3	-7 12.951'	80	48.366'	3	19.747	22.463	2.647	487.58	22.044	46.391	1556.00	200	1.200	189.400
3/13/81	16:40:	3	-7 12.951'	80	48.366'	3	19.492	22.637	1.631	127.09	22.074	52.355	1556.00	200	1.700	177.100
3/13/81	16:55:	3	-7 12.885'	80	46.536'	3	19.787	22.481	1.631	123.53	22.080	49.259	1632.00	200	2.600	185.100
3/13/81	17:10:	3	-7 12.885'	80	46.536'	3	19.559	22.576	2.362	127.12	22.111	54.742	1632.00	200	2.100	189.900
3/13/81	17:25:	3	-7 12.885'	80	46.536'	3	19.684	22.466	2.056	124.78	22.252	64.432	1632.00	200	1.500	188.700
3/13/81	17:40:	3	-7 12.885'	80	46.536'	3	19.345	22.640	1.248	111.65	22.217	70.554	1632.00	200	4.100	117.700
3/13/81	17:55:	3	-7 12.885'	80	46.536'	3	19.326	23.104	5.095	36.04	22.233	79.308	1632.00	200	1.000	173.400
3/13/81	18:10:	3	-7 12.480'	80	48.704'	3	19.312	22.885	1.051	462.82	22.367	70.205	1744.00	200	20.200	146.900
3/13/81	18:25:	3	-7 12.480'	80	48.704'	3	19.750	23.890	20.642	360.42	22.386	145.820	1744.00	200	23.400	282.300
3/13/81	18:40:	3	-7 12.722'	80	48.257'	2	20.585	24.733	23.418	467.80	22.210	148.910	1822.00	200	22.900	169.900
3/13/81	18:55:	3	-7 12.722'	80	48.257'	2	16.332	24.617	22.900	379.04	22.425	147.130	1822.00	200	22.900	159.100
3/13/81	19:10:	3	-7 12.722'	80	48.257'	2	20.444	25.337	23.035	370.51	22.545	147.600	1822.00	200	13.200	168.800

C END OF TEST STATION STEAMING TO NEXT STATION TIME 19:15

3/13/81	19:25:	4	-7 12.722'	80	48.257'	2	20.725	25.364	23.732	370.53	22.722	148.690	1822.00	10.800	13.900	170.700
3/13/81	19:40:	5	-7 12.722'	80	48.257'	2	20.523	25.340	24.059	372.17	22.928	148.370	1822.00	10.800	14.900	172.800
3/13/81	19:55:	5	-7 23.836'	80	41.608'	3	20.363	24.988	24.765	374.00	23.011	148.040	1934.00	10.800	13.600	166.300
3/13/81	20:10:	5	-7 23.836'	80	41.608'	3	20.718	25.337	24.094	369.79	22.802	147.470	1934.00	10.700	14.100	162.200
3/13/81	20:25:	5	-7 23.836'	80	41.608'	3	20.665	25.504	24.924	368.56	22.654	147.670	1934.00	10.800	14.500	159.000
3/13/81	20:40:	5	-7 23.836'	80	41.608'	3	20.106	25.365	25.037	365.93	22.534	147.610	1934.00	10.800	13.200	157.300
3/13/81	20:55:	5	-7 23.836'	80	41.608'	3	20.670	25.514	23.982	364.94	22.780	148.530	1934.00	10.800	14.600	162.700
3/13/81	21:10:	5	-7 23.836'	80	41.608'	3	20.474	25.521	26.063	367.54	22.970	148.240	1934.00	10.700	16.000	164.200
3/13/81	21:25:	5	-7 23.836'	80	41.608'	3	20.388	25.449	369.55	369.55	22.840	147.780	1934.00	10.800	14.900	162.000
3/13/81	21:40:	5	-7 23.836'	80	41.608'	3	20.075	25.699	369.14	369.14	22.929	146.930	1934.00	10.700	15.100	154.200
3/13/81	21:55:	5	-7 23.836'	80	41.608'	3	20.436	25.871	365.79	365.79	23.186	147.690	1934.00	10.700	15.200	171.400
3/13/81	22:10:	5	-7 23.836'	80	41.608'	3	20.225	25.723	26.121	373.51	23.304	148.440	1934.00	10.700	15.400	166.800
3/13/81	22:25:	5	-7 45.576'	80	30.379'	4	20.443	25.520	26.077	371.73	23.460	148.210	2150.00	10.800	16.400	163.800
3/13/81	22:40:	5	-7 45.576'	80	30.379'	4	20.302	25.161	26.596	368.82	23.424	148.520	2150.00	10.700	15.700	164.200
3/13/81	22:55:	5	-7 45.576'	80	30.379'	4	20.248	24.646	26.032	369.65	23.558	147.650	2150.00	10.800	14.700	159.900
3/13/81	23:10:	5	-7 45.576'	80	30.379'	4	20.232	24.262	367.31	367.31	23.217	147.280	2150.00	10.800	15.300	176.100
3/13/81	23:25:	5	-7 56.428'	80	23.615'	3	19.011	23.446	25.798	375.41	23.353	148.730	2256.00	10.800	13.400	173.400
3/13/81	23:40:	5	-7 56.428'	80	23.615'	3	19.910	23.017	23.413	373.44	23.066	148.230	2256.00	10.800	13.400	173.400

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROWSP	APPRODUR	SEATEMP	CYNOCHED	ZULUFTX	MANLSPD	TRWDSPD	TRWDIR
3/13/81	23:55: 5	-7 56.428'	80 23.615'	3	19.722	22.707	24.494	371.33	22.552	149.370	2256.03	10.800	13.900	167.700
3/13/81	0:10: 5	-8 3.082'	80 19.099'	2	20.221	22.640	24.201	366.80	22.258	147.550	2338.00	11.100	12.900	159.000
3/14/81	0:25: 5	-8 3.082'	80 19.099'	2	19.777	22.753	24.096	365.91	22.192	148.310	2338.00	11.100	13.900	160.100
3/14/81	0:40: 5	-8 3.082'	80 19.099'	2	20.420	22.659	10.764	377.08	22.328	156.910	2338.00	11.000	2.400	257.500
3/14/81	0:55: 5	-8 3.082'	80 19.099'	2	20.556	22.460	2.867	476.95	22.549	78.483	2338.00	11.000	12.600	246.000
3/14/81	1:10: 5	-8 10.987'	80 15.549'	4	20.437	22.460	3.425	487.67	22.473	73.576	42.00	11.000	13.300	242.200
3/14/81	1:25: 5	-8 10.987'	80 15.549'	4	19.808	22.460	7.372	410.97	22.404	94.379	42.00	11.000	10.400	262.800
3/14/81	1:40: 5	-8 10.987'	80 15.549'	4	20.248	22.460	25.728	362.16	22.413	145.690	42.00	11.300	14.200	149.800
3/14/81	1:55: 5	-8 10.987'	80 15.549'	4	20.002	22.460	26.334	364.58	22.456	138.620	42.00	11.700	14.900	147.300
3/14/81	2:10: 5	-8 10.987'	80 15.549'	4	19.861	22.460	28.490	363.61	22.458	146.810	42.00	11.300	17.100	153.700
3/14/81	2:25: 5	-8 10.987'	80 15.549'	4	20.030	22.283	28.735	363.41	22.532	147.490	42.00	11.300	17.300	152.900
3/14/81	2:40: 5	-8 10.987'	80 15.549'	4	19.770	22.460	30.104	364.08	22.644	146.210	42.00	11.300	18.200	152.900
3/14/81	2:55: 5	-8 10.987'	80 15.549'	4	19.883	22.576	28.921	360.22	22.815	146.280	42.00	11.300	16.700	147.400
3/14/81	3:10: 5	-8 10.987'	80 15.549'	4	20.223	22.616	26.894	356.50	22.853	146.920	42.00	11.300	15.300	141.600
3/14/81	3:25: 5	-8 10.987'	80 15.549'	4	19.988	22.454	27.937	355.24	22.735	147.280	42.00	11.300	16.900	139.300
3/14/81	3:40: 5	-8 27.826'	80 4.693'	3	19.560	22.280	29.385	354.68	22.669	145.400	316.00	11.300	17.800	137.200
3/14/81	3:55: 5	-8 27.826'	80 4.693'	3	19.407	22.281	30.084	351.57	22.506	145.930	316.00	11.300	18.500	131.700
3/14/81	4:10: 5	-8 27.826'	80 4.693'	3	19.472	22.280	30.097	346.00	22.595	145.690	316.00	11.300	18.900	124.600
3/14/81	4:25: 5	-8 35.020'	80 0.054'	3	19.385	22.280	28.851	347.74	22.615	147.770	402.00	11.300	17.600	126.800
3/14/81	4:40: 5	-8 35.020'	80 0.054'	3	19.554	22.280	27.818	349.40	22.616	146.620	402.00	11.300	16.000	128.500
3/14/81	4:55: 5	-8 35.020'	80 0.054'	3	19.580	22.100	28.709	357.10	22.579	146.430	402.00	11.300	17.300	140.600
3/14/81	5:10: 5	-8 35.020'	80 0.054'	3	19.702	22.116	28.405	356.50	22.551	147.700	402.00	11.300	16.700	142.500
3/14/81	5:25: 5	-8 44.785'	79 53.943'	2	19.337	22.100	27.857	354.62	22.450	146.520	506.00	11.300	15.900	138.200
3/14/81	5:40: 5	-8 47.197'	79 52.689'	3	19.333	22.100	27.043	354.34	22.399	147.820	506.00	11.300	15.900	138.200
3/14/81	5:55: 5	-8 47.197'	79 52.689'	3	19.332	21.920	25.671	357.64	22.410	147.540	518.00	11.300	14.300	144.400
3/14/81	6:10: 5	-8 47.197'	79 52.689'	3	19.122	21.764	26.254	358.94	22.335	147.110	518.00	11.300	14.900	145.200
3/14/81	6:25: 5	-8 52.728'	79 49.556'	2	19.388	21.759	25.315	357.66	22.301	144.750	518.00	11.300	13.500	140.200
3/14/81	6:40: 5	-8 52.728'	79 49.556'	2	19.387	21.740	27.325	360.20	22.270	146.270	552.00	11.300	15.700	140.200
3/14/81	6:55: 5	-8 52.728'	79 49.556'	2	18.893	21.621	27.053	362.88	22.251	151.930	552.00	11.300	15.700	158.100
3/14/81	7:10: 5	-8 52.728'	79 49.556'	2	19.114	21.618	25.973	364.03	21.979	145.250	552.00	11.300	15.000	152.800
3/14/81	7:25: 5	-9 3.851'	79 43.396'	3	18.892	21.562	26.364	366.59	21.881	134.610	700.00	11.300	14.700	145.600
3/14/81	7:40: 5	-9 3.851'	79 43.396'	3	18.858	21.438	26.215	367.31	21.824	128.990	700.00	11.300	14.800	141.600
3/14/81	7:55: 5	-9 3.851'	79 43.396'	3	18.526	21.380	26.955	367.50	21.782	128.330	700.00	11.300	15.600	142.100
3/14/81	8:10: 5	-9 3.851'	79 43.396'	3	18.669	21.377	26.558	364.99	21.782	146.230	700.00	11.300	15.100	153.900
3/14/81	8:25: 5	-9 3.851'	79 43.396'	3	18.805	21.396	28.674	364.14	21.814	145.660	700.00	11.400	18.200	152.800
3/14/81	8:40: 5	-9 3.851'	79 43.396'	3	18.474	21.446	29.832	365.53	21.831	147.010	700.00	11.400	17.100	158.100
3/14/81	8:55: 5	-9 3.851'	79 43.396'	3	18.747	21.386	29.541	360.02	21.792	145.720	700.00	11.300	17.500	145.700
3/14/81	9:10: 5	-9 3.851'	79 43.396'	3	19.047	21.380	27.493	357.37	21.893	146.600	700.00	11.300	16.900	141.700
3/14/81	9:25: 5	-9 3.851'	79 43.396'	3	18.826	21.380	28.501	366.26	21.908	147.070	700.00	11.300	17.000	163.300
3/14/81	9:40: 5	-9 25.116'	79 29.286'	3	18.666	21.380	28.197	359.85	21.865	147.410	918.00	11.100	16.800	146.500
3/14/81	9:55: 6	-9 25.116'	79 29.286'	3	18.667	21.380	28.136	357.10	21.831	146.820	918.00	11.100	17.500	139.500
3/14/81	10:10: 6	-9 25.116'	79 29.286'	3	18.446	21.378	28.322	355.55	21.762	147.850	918.00	11.100	18.200	142.400
3/14/81	10:25: 6	-9 25.116'	79 29.286'	3	18.229	21.373	29.619	357.02	21.813	147.400	918.00	11.100	18.200	142.400
3/14/81	10:40: 6	-9 25.116'	79 29.286'	3	18.252	21.380	30.913	356.38	21.798	148.350	918.00	11.100	19.700	141.400
3/14/81	10:55: 6	-9 37.125'	79 22.502'	3	18.226	21.380	29.590	353.44	21.692	147.230	1030.00	11.000	17.700	139.700
3/14/81	11:10: 6	-9 37.125'	79 22.502'	3	18.433	21.380	28.931	355.32	21.499	147.220	1030.00	11.000	17.700	139.700
3/14/81	11:25: 6	-9 37.125'	79 22.502'	3	17.780	21.378	29.550	352.77	21.403	146.560	1030.00	11.000	18.700	136.100
3/14/81	11:40: 6	-9 43.138'	79 19.329'	2	18.000	21.378	29.181	354.22	21.316	148.150	1106.00	11.300	18.400	138.700
3/14/81	11:55: 6	-9 43.138'	79 19.329'	2	18.361	21.200	28.145	355.87	21.213	148.930	1106.00	11.300	17.400	142.200
3/14/81	12:10: 6	-9 43.138'	79 19.329'	2	18.269	21.380	30.963	356.14	21.252	147.920	1106.00	11.300	19.800	141.400
3/14/81	12:25: 6	-9 43.138'	79 19.329'	2	18.082	21.560	30.503	351.93	21.207	149.140	1106.00	11.300	39.900	303.100
3/14/81	12:40: 6	-9 54.299'	79 13.396'	5	18.274	21.561	29.777	715.83	21.205	146.820	1212.00	11.200	19.100	139.700
3/14/81	12:55: 8	-9 54.299'	79 13.396'	5	18.424	21.560	29.784	718.27	21.171	148.450	1212.00	11.100	18.300	145.800
3/14/81	13:10: 8	-9 54.299'	79 13.396'	5	18.335	21.551	29.324	718.85	21.087	148.190	1212.00	11.100	18.700	145.100
3/14/81	13:25: 8	-9 54.299'	79 13.396'	5	17.998	21.219	25.404	714.01	21.021	148.890	1212.00	11.200	14.200	138.900
3/14/81	13:40: 8	-9 54.299'	79 13.396'	5	18.000	21.158	25.706	711.75	20.964	146.830	1212.00	11.200	14.300	133.000
3/14/81	13:55: 8	-9 54.299'	79 13.396'	5	17.796	21.020	24.658	713.27	20.793	147.470	1212.00	11.100	13.400	134.000
3/14/81	14:10: 8	-9 54.299'	79 13.396'	5	17.770	21.019	22.559	368.59	20.521	147.260	1212.00	11.200	11.600	171.900
3/14/81	14:25: 8	-9 54.299'	79 13.396'	5	17.555	21.197	22.057	364.09	20.320	146.280	1212.00	11.200	10.900	154.800
3/14/81	14:40: 8	-9 54.299'	79 13.396'	5	17.995	21.380	21.317	361.49	20.075	147.070	1212.00	11.200	10.300	151.000

DATE	TIME	DEC, MIN-LAT	DEC, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	APPROX	SEATEMP	CYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
3/14/81	14:55:	8 -9 54.299'	79 13.396'	5	17.990	21.045	21.901	354.02	19.914	146.030	1212.00	11.200	11.000	134.300
3/14/81	15:10:	8 -10 20.861'	78 57.742'	3	17.533	20.840	22.431	356.11	19.817	146.300	1448.00	11.200	11.500	137.900
3/14/81	15:25:	8 -10 20.861'	78 57.742'	3	17.836	20.846	24.039	359.55	19.799	146.350	1448.00	11.200	13.000	146.000
3/14/81	15:40:	8 -10 20.861'	78 57.742'	3	17.675	20.833	22.750	355.11	19.607	147.170	1448.00	11.100	11.900	137.200
3/14/81	15:55:	8 -10 20.861'	78 57.742'	3	17.347	20.840	23.828	355.69	19.515	145.480	1448.00	11.100	12.900	137.700
3/14/81	16:10:	8 -10 30.406'	78 51.876'	3	17.555	20.840	22.976	355.54	19.560	147.130	1544.00	11.100	11.700	137.500
3/14/81	16:25:	8 -10 30.406'	78 51.876'	3	17.998	21.020	22.234	357.76	19.616	145.590	1544.00	11.200	11.000	141.300
3/14/81	16:40:	8 -10 30.406'	78 51.876'	3	17.995	21.727	22.873	363.55	19.562	146.770	1544.00	11.200	11.500	154.200
3/14/81	16:55:	8 -10 30.406'	78 51.876'	3	18.215	22.279	23.092	365.74	19.609	146.940	1544.00	11.200	12.100	158.400
3/14/81	17:10:	8 -10 42.184'	78 46.215'	3	18.666	22.639	23.138	365.83	19.429	147.910	1636.00	11.100	12.000	160.000
3/14/81	17:25:	8 -10 42.184'	78 46.215'	4	19.080	22.999	22.556	366.77	19.542	147.370	1654.00	11.200	11.800	160.800
3/14/81	17:40:	8 -10 42.184'	78 46.215'	3	19.333	23.360	22.516	365.39	19.999	146.990	1654.00	11.200	11.100	157.400
3/14/81	17:55:	8 -10 48.668'	78 40.548'	3	19.988	23.875	24.481	364.66	20.303	147.350	1732.00	11.200	13.600	157.000
3/14/81	18:10:	8 -10 48.668'	78 40.548'	3	19.998	24.080	27.821	364.67	20.691	130.070	1732.00	11.200	16.800	138.200
3/14/81	18:25:	8 -10 48.668'	78 40.548'	3	19.788	24.258	29.184	365.75	20.742	147.320	1732.00	11.200	18.100	155.400
3/14/81	18:40:	8 -10 48.668'	78 40.548'	3	20.222	24.422	29.517	366.37	20.742	147.320	1732.00	11.000	18.400	157.300
3/14/81	18:55:	8 -10 48.668'	78 40.548'	3	20.020	24.447	29.399	367.70	21.106	146.810	1732.00	11.000	18.400	159.700
3/14/81	19:10:	8 -10 59.900'	78 33.768'	3	19.417	24.569	31.339	369.59	21.305	146.680	1840.00	11.000	21.000	161.300
3/14/81	19:25:	8 -10 59.900'	78 33.768'	3	19.784	24.797	30.719	367.45	21.496	147.870	1840.00	10.900	19.800	160.700
3/14/81	19:40:	8 -10 59.900'	78 33.768'	3	19.777	24.800	31.436	368.13	21.941	147.760	1840.00	10.900	20.900	158.900
3/14/81	19:55:	8 -10 59.900'	78 33.768'	3	19.988	24.980	30.456	368.49	22.366	147.760	1840.00	10.900	19.600	161.800
3/14/81	20:10:	8 -10 59.900'	78 33.768'	3	20.211	24.986	28.707	369.47	22.686	147.440	1840.00	10.900	18.300	160.600
3/14/81	20:25:	8 -10 59.900'	78 33.768'	3	20.144	24.980	29.450	369.35	22.986	147.280	1840.00	10.900	18.300	163.300
3/14/81	20:40:	8 -10 59.900'	78 33.768'	3	20.029	22.822	2.445	157.30	23.085	108.810	1840.00	11.000	13.100	291.300
3/14/81	20:55:	8 -10 59.900'	78 33.768'	3	20.171	22.807	2.742	128.32	23.141	81.715	1840.00	10.900	13.300	257.600
3/14/81	21:10:	8 -11 16.903'	78 21.926'	3	20.071	22.818	4.753	134.66	23.109	81.715	2102.00	10.800	14.900	252.400
3/14/81	21:25:	8 -11 16.903'	78 21.926'	3	19.781	22.819	5.035	121.99	23.078	79.357	2102.00	10.900	15.900	240.500
3/14/81	21:40:	8 -11 16.903'	78 21.926'	3	19.993	22.819	4.844	138.97	23.057	74.593	2102.00	10.900	19.600	152.000
3/14/81	21:55:	8 -11 16.903'	78 21.926'	3	19.557	23.500	31.022	366.35	22.997	144.870	2102.00	10.900	20.400	164.200
3/14/81	22:10:	8 -11 16.903'	78 21.926'	3	19.356	23.900	31.603	370.71	23.003	148.030	2102.00	10.900	20.700	160.800
3/14/81	22:25:	8 -11 16.903'	78 21.926'	3	19.585	23.771	30.655	369.23	23.026	146.600	2102.00	10.900	20.300	164.700
3/14/81	22:40:	8 -11 16.903'	78 21.926'	3	19.333	23.369	30.877	370.92	22.968	147.760	2102.00	10.900	18.500	164.400
3/14/81	22:55:	8 -11 16.903'	78 21.926'	3	19.205	22.998	28.930	370.35	22.790	148.910	2248.00	10.900	17.000	159.800
3/14/81	23:10:	8 -11 22.510'	78 17.343'	4	19.240	22.444	27.774	368.73	22.633	147.460	2248.00	10.900	14.800	157.500
3/14/81	23:25:	8 -11 22.510'	78 17.343'	4	18.891	22.303	25.112	364.41	22.546	146.070	2248.00	11.100	13.500	156.300
3/14/81	23:40:	8 -11 22.510'	78 17.343'	4	18.892	21.904	22.902	364.62	21.593	147.610	2248.00	11.100	11.700	156.400
3/14/81	23:55:	8 -11 22.510'	78 17.343'	3	18.738	21.576	22.198	364.20	21.581	146.140	2354.00	11.200	11.000	154.600
3/15/81	0:10:	8 -11 33.039'	78 11.077'	3	18.659	21.387	21.541	363.89	20.737	147.820	2354.00	11.100	10.600	156.500
3/15/81	0:25:	8 -11 33.039'	78 11.077'	3	18.500	21.200	21.747	363.94	20.230	146.930	2354.00	11.100	10.300	155.300
3/15/81	0:40:	8 -11 33.039'	78 11.077'	3	18.435	21.020	22.864	364.30	19.863	146.660	2354.00	11.100	11.500	155.000
3/15/81	0:55:	8 -11 33.039'	78 11.077'	3	18.422	21.199	23.914	363.62	19.703	147.170	2354.00	11.100	13.200	153.400
3/15/81	1:10:	8 -11 33.039'	78 11.077'	3	18.666	21.242	25.457	363.14	20.136	147.870	2354.00	11.100	14.500	153.800
3/15/81	1:25:	8 -11 33.039'	78 11.077'	3	18.670	21.244	25.639	381.07	20.477	145.540	142.00	11.100	18.100	202.400
3/15/81	1:40:	8 -11 50.844'	77 59.951'	3	18.098	21.094	25.752	361.75	20.781	147.550	142.00	11.100	14.800	151.000
3/15/81	1:55:	8 -11 50.844'	77 59.951'	3	18.867	21.380	25.445	361.56	20.905	147.690	208.00	11.100	14.600	150.600
3/15/81	2:10:	8 -11 55.077'	77 57.500'	3	19.110	21.535	25.296	437.07	21.091	147.470	208.00	11.100	27.800	259.800
3/15/81	2:25:	8 -11 55.077'	77 57.500'	3	19.028	21.560	26.830	369.79	21.422	146.710	208.00	11.100	16.000	172.800
3/15/81	2:40:	8 -11 55.077'	77 57.500'	3	19.940	21.940	25.441	359.59	21.696	147.550	208.00	11.200	14.300	146.400
3/15/81	2:55:	8 -11 55.077'	77 57.500'	3	19.028	21.447	26.454	359.81	21.790	147.490	314.00	10.900	14.900	147.600
3/15/81	3:10:	8 -11 55.077'	77 57.500'	3	18.971	21.544	25.790	360.81	21.706	146.200	314.00	10.900	15.200	150.000
3/15/81	3:25:	8 -12 5.558'	77 50.756'	3	19.029	21.430	26.527	459.67	21.718	147.950	314.00	11.000	15.900	168.700
3/15/81	3:40:	8 -12 5.558'	77 50.756'	3	19.079	21.380	26.948	368.54	21.574	147.170	356.00	10.900	15.200	157.400
3/15/81	3:55:	8 -12 12.350'	77 46.518'	3	18.697	21.380	25.999	364.95	21.777	147.920	356.00	11.000	15.200	176.000
3/15/81	4:10:	8 -12 12.350'	77 46.518'	3	18.748	21.380	25.708	403.65	21.739	145.450	422.00	11.000	18.600	202.000
3/15/81	4:25:	8 -12 12.350'	77 46.518'	3	18.888	21.251	26.053	381.90	21.739	145.450	422.00	10.900	16.300	190.100
3/15/81	4:40:	8 -12 16.485'	77 43.668'	2	18.858	21.200	25.716	376.38	20.529	146.720	422.00	10.900	15.500	155.900
3/15/81	4:55:	8 -12 16.485'	77 43.668'	2	18.721	21.200	26.231	363.93	20.642	146.040	504.00	10.900	14.700	157.200
3/15/81	5:10:	8 -12 23.109'	77 39.644'	3	18.889	21.218	26.144	391.64	21.362	146.870	504.00	10.900	14.700	157.200
3/15/81	5:25:	8 -12 23.109'	77 39.644'	3	18.889	21.218	26.144	391.64	21.362	146.870	504.00	10.900	14.700	157.200
3/15/81	5:40:	8 -12 23.109'	77 39.644'	3	18.889	21.218	26.144	391.64	21.362	146.870	504.00	10.900	14.700	157.200

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	APPROX	SEATEMP	GYROHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/15/81	5:55:10	-12 23.109'	77 39.644'	3	18.888	21.313	25.122	364.41	21.504	147.440	504.00	10.900	14.300	155.700
3/15/81	6:10:10	-12 23.109'	77 39.644'	3	18.665	21.206	26.432	366.57	21.663	145.530	504.00	10.900	15.600	156.700
3/15/81	6:25:10	-12 23.109'	77 39.644'	3	18.595	21.206	26.907	369.76	21.572	147.190	504.00	10.900	15.900	163.300
3/15/81	6:40:10	-12 23.109'	77 39.644'	3	18.666	21.337	27.713	371.76	21.470	147.390	504.00	10.900	17.000	166.200
3/15/81	6:55:10	-12 23.109'	77 39.644'	3	18.888	21.265	27.278	371.68	21.555	146.620	504.00	10.900	15.800	164.900
3/15/81	7:10:10	-12 23.109'	77 39.644'	3	18.404	21.266	28.075	373.13	21.829	148.080	504.00	10.900	17.200	168.800
3/15/81	7:25:10	-12 23.109'	77 39.644'	3	18.304	21.248	29.456	374.64	21.836	146.360	504.00	10.900	19.600	169.100
3/15/81	7:40:10	-12 23.109'	77 39.644'	3	18.384	21.248	29.456	376.29	21.640	145.740	504.00	10.900	19.500	171.200
3/15/81	7:55:10	-12 23.109'	77 39.644'	3	18.378	21.267	30.310	375.12	21.646	146.940	504.00	10.900	20.100	171.400
3/15/81	8:10:10	-12 23.109'	77 39.644'	3	18.304	21.380	31.677	374.91	21.639	147.220	504.00	10.900	21.000	169.100
3/15/81	8:25:10	-12 23.109'	77 39.644'	3	18.444	21.380	31.527	373.98	21.639	146.630	504.00	10.900	20.800	167.000
3/15/81	8:40:10	-12 23.109'	77 39.644'	3	18.224	21.261	32.036	374.54	21.550	146.310	504.00	10.900	21.500	167.500
3/15/81	8:55:10	-12 23.109'	77 39.644'	3	18.140	21.200	32.586	374.52	21.565	147.270	830.00	10.900	22.400	169.600
3/15/81	9:10:10	-12 23.109'	77 39.644'	3	17.871	21.200	34.120	376.08	21.615	147.770	830.00	10.900	23.500	169.600
3/15/81	9:25:10	-12 23.109'	77 39.644'	3	17.921	21.159	34.008	376.64	21.699	148.250	830.00	10.900	24.200	170.500
3/15/81	9:40:10	-12 23.109'	77 39.644'	3	17.937	21.020	32.518	373.87	21.677	146.960	830.00	10.900	22.500	169.300
3/15/81	9:55:10	-12 23.109'	77 39.644'	3	17.696	20.846	33.177	374.01	21.464	147.400	830.00	10.900	21.900	169.600
3/15/81	10:10:10	-12 23.109'	77 39.644'	3	17.344	20.840	31.822	376.23	21.236	146.820	830.00	10.900	21.200	170.900
3/15/81	10:25:10	-12 23.109'	77 39.644'	3	17.503	20.773	32.297	377.54	20.951	146.130	830.00	10.900	22.300	172.100
3/15/81	10:40:10	-12 23.109'	77 39.644'	3	17.359	20.840	35.516	375.53	20.942	147.580	830.00	10.700	25.500	168.600
3/15/81	10:55:10	-12 23.109'	77 39.644'	3	17.360	20.682	34.745	374.14	20.869	147.610	830.00	10.700	25.100	166.200
3/15/81	11:10:10	-12 23.109'	77 39.644'	3	17.393	20.660	36.131	370.94	20.889	147.560	830.00	10.700	26.100	164.100
3/15/81	11:25:10	-12 23.109'	77 39.644'	3	17.193	20.480	36.640	371.00	20.866	147.830	830.00	10.700	26.200	162.800
3/15/81	11:40:10	-12 23.109'	77 39.644'	3	17.250	20.300	35.271	368.72	20.667	148.050	830.00	10.500	25.100	160.200
3/15/81	11:55:10	-13 21.368'	77 2.231'	3	17.040	20.007	30.949	370.61	20.291	146.960	1122.00	10.500	21.300	163.100
3/15/81	12:10:10	-13 21.368'	77 2.231'	3	16.787	19.982	32.332	368.32	19.633	146.930	1122.00	10.500	21.600	160.000
3/15/81	12:25:10	-13 21.368'	77 2.231'	3	17.181	19.940	32.148	369.33	19.320	147.050	1122.00	10.500	22.000	160.400
3/15/81	12:40:10	-13 21.368'	77 2.231'	3	16.686	20.120	31.449	366.83	19.135	147.820	1122.00	10.700	21.400	159.100
3/15/81	12:55:10	-13 21.368'	77 2.231'	3	16.817	20.300	33.172	368.70	19.377	148.020	1122.00	10.700	23.200	161.100
3/15/81	13:10:10	-13 21.368'	77 2.231'	3	16.666	20.284	34.187	370.76	19.606	146.580	1122.00	10.800	23.700	162.700
3/15/81	13:25:10	-13 21.368'	77 2.231'	3	16.632	20.300	32.738	368.55	19.589	147.660	1122.00	10.800	22.500	161.800
3/15/81	13:40:10	-13 37.712'	76 51.796'	3	16.795	20.501	34.072	366.59	19.740	147.010	1310.00	10.800	23.300	156.800
3/15/81	13:55:10	-13 37.712'	76 51.796'	3	16.236	20.660	34.823	367.20	19.931	147.820	1310.00	10.900	23.600	158.500
3/15/81	14:10:10	-13 42.852'	76 48.429'	2	16.444	20.840	35.161	367.02	19.836	147.760	1344.00	10.800	24.300	158.400
3/15/81	14:25:10	-13 42.852'	76 48.429'	2	16.333	20.977	34.619	367.26	19.565	147.030	1344.00	10.900	23.200	159.000
3/15/81	14:40:10	-13 42.852'	76 48.429'	2	16.293	20.888	34.142	368.59	19.439	148.170	1344.00	10.800	24.100	159.300
3/15/81	14:55:10	-13 42.852'	76 48.429'	2	16.243	20.975	35.185	366.57	19.371	147.050	1344.00	10.800	24.100	157.300
3/15/81	15:10:10	-13 42.852'	76 48.429'	2	16.516	20.840	33.923	367.28	19.289	147.200	1344.00	10.900	24.100	158.600
3/15/81	15:25:10	-13 53.959'	76 41.054'	3	16.443	20.837	33.467	364.42	19.119	151.720	1458.00	10.800	22.800	157.900
3/15/81	15:40:10	-13 53.959'	76 41.054'	3	16.362	20.978	33.958	364.52	18.948	151.300	1458.00	10.800	22.600	159.200
3/15/81	15:55:10	-13 58.124'	76 38.449'	3	15.781	20.663	34.418	366.83	18.605	151.490	1526.00	10.800	24.000	161.200
3/15/81	16:10:10	-13 58.124'	76 38.449'	3	15.777	20.660	34.817	369.02	18.205	150.880	1526.00	10.800	23.700	161.900
3/15/81	16:25:10	-14 4.065'	76 35.202'	2	15.575	20.600	34.189	367.10	17.915	151.730	1604.00	10.800	23.400	161.700
3/15/81	16:40:10	-14 4.065'	76 35.202'	2	15.529	20.660	34.261	365.89	17.506	151.320	1604.00	10.400	23.600	160.100
3/15/81	16:55:12	-14 4.065'	76 35.202'	2	15.285	20.478	33.656	365.10	17.189	150.910	1604.00	10.500	22.700	158.300
3/15/81	17:10:12	-14 10.427'	76 31.881'	3	15.351	20.678	32.795	365.75	17.128	150.250	1644.00	10.400	22.600	160.800
3/15/81	17:25:12	-14 10.427'	76 31.881'	3	14.934	20.775	31.899	365.29	16.793	153.220	1644.00	10.500	22.100	160.400
3/15/81	17:40:12	-14 10.427'	76 31.881'	3	15.327	21.020	30.701	365.95	16.775	152.930	1644.00	10.500	20.100	161.000
3/15/81	17:55:12	-14 10.427'	76 31.881'	3	15.333	21.194	30.407	365.59	17.107	152.650	1644.00	10.400	19.500	160.100
3/15/81	18:10:12	-14 20.563'	76 26.582'	3	16.052	21.721	31.530	367.01	17.160	152.260	1748.00	10.500	21.100	161.900
3/15/81	18:25:12	-14 20.563'	76 26.582'	3	16.532	21.878	30.676	364.67	17.520	151.810	1748.00	10.400	20.400	159.000
3/15/81	18:40:12	-14 20.563'	76 26.582'	3	16.898	22.277	29.479	364.61	17.901	152.380	1748.00	10.500	19.000	157.500
3/15/81	18:55:12	-14 20.563'	76 26.582'	3	17.333	22.273	27.819	392.59	18.270	152.070	1748.00	10.500	17.000	158.100
3/15/81	19:10:12	-14 20.563'	76 26.582'	3	17.412	22.458	27.615	363.57	18.386	152.540	1748.00	10.400	17.000	157.800
3/15/81	19:25:12	-14 20.563'	76 26.582'	3	17.695	22.706	26.849	363.04	18.469	152.800	1748.00	10.400	14.500	157.800
3/15/81	19:40:12	-14 20.563'	76 26.582'	3	18.805	22.974	27.548	362.41	18.796	152.910	1748.00	10.500	17.100	156.600
3/15/81	19:55:12	-14 20.563'	76 26.582'	3	18.972	23.535	31.491	362.91	19.020	152.060	1748.00	10.400	20.100	156.300
3/15/81	20:10:12	-14 20.563'	76 26.582'	3	19.109	23.777	31.115	363.26	19.457	151.260	1748.00	10.500	21.000	156.600
3/15/81	20:25:12	-14 20.563'	76 26.582'	3	19.329	24.077	32.524	363.40	19.736	151.390	1748.00	10.400	21.700	156.100
3/15/81	20:40:12	-14 20.563'	76 26.582'	3	19.333	24.074	34.214	363.02	20.193	152.610	1748.00	10.500	23.800	155.900

DATE TIME DEG. MIN-LAT DEG. MIN-LNG FIX DEWPOINT AIRTEMP APPRWSP APPRWSR SEATEMP GYROHED ZULUFIX NANLSPD TRWDSPD TRWDDIR

3/15/81	20:55:12	-14 20.563'	76 26.582'	3	19.208	24.259	32.085	363.60	20.304	151.370	1748.00	10.400	22.000	156.800
3/15/81	21:10:12	-14 20.563'	76 26.582'	3	19.555	24.131	32.651	363.17	20.537	152.010	1748.00	10.400	22.800	156.600
3/15/81	21:25:12	-14 20.563'	76 26.582'	3	19.191	23.793	33.330	361.57	20.569	152.270	1748.00	10.400	22.800	154.600
3/15/81	21:40:12	-14 20.563'	76 26.582'	3	18.827	23.720	32.628	360.73	20.263	152.680	1748.00	10.400	22.700	152.600
3/15/81	21:55:12	-14 20.563'	76 26.582'	3	18.915	23.678	33.506	362.81	20.273	151.730	1748.00	10.400	22.200	155.500
3/15/81	22:10:12	-14 20.563'	76 26.582'	3	18.670	23.540	34.927	361.94	20.197	151.230	1748.00	10.400	24.300	153.500
3/15/81	22:25:12	-15 0.585'	76 6.722'	3	18.440	23.184	33.674	361.93	20.064	152.540	2158.00	10.400	23.500	153.600
3/15/81	22:40:12	-15 0.585'	76 6.722'	3	18.004	22.710	32.900	360.44	19.473	151.180	2158.00	10.500	22.300	152.900
3/15/81	22:55:12	-15 0.585'	76 6.722'	3	18.443	22.640	34.827	359.56	18.929	150.400	2158.00	10.500	24.600	150.700
3/15/81	23:10:12	-15 0.585'	76 6.722'	3	18.802	22.640	34.041	360.17	19.679	152.730	2158.00	10.400	23.100	151.900
3/15/81	23:25:12	-15 0.585'	76 6.722'	3	18.915	22.804	35.257	360.74	20.759	151.720	2158.00	10.100	24.900	152.600
3/15/81	23:40:12	-15 11.258'	76 2.071'	2	18.879	22.817	35.355	363.41	21.204	142.570	2308.00	10.100	25.800	147.100
3/15/81	23:55:12	-15 11.258'	76 2.071'	2	18.783	23.000	35.671	363.09	21.851	142.520	2308.00	10.100	25.700	147.600
3/15/81	0:10:12	-15 11.258'	76 2.071'	2	18.907	23.178	37.185	363.91	22.772	142.140	2308.00	10.200	26.500	146.700
3/15/81	0:25:12	-15 11.258'	76 2.071'	2	19.329	23.312	35.581	363.65	23.422	141.640	2308.00	10.200	25.300	146.900
3/16/81	0:40:12	-15 11.258'	76 2.071'	2	18.894	23.309	35.578	364.01	23.870	141.820	2308.00	10.200	26.400	147.200
3/16/81	0:55:12	-15 11.258'	76 2.071'	2	18.884	23.230	37.226	363.79	24.069	141.260	2308.00	10.200	26.000	145.800

C ARRIVED ON STATION #2 AT 01:01 Z

3/16/81	1:10:12	-15 11.258'	76 2.071'	2	19.957	23.473	6.655	135.49	24.202	53.871	2308.00	10.100	14.300	211.800
3/16/81	1:25:13	-15 25.174'	75 54.519'	4	19.558	23.189	9.964	137.66	24.173	49.176	52.00	10.200	18.400	211.200
3/16/81	1:40:13	-15 25.174'	75 54.519'	4	18.359	23.466	19.844	202.37	24.158	305.150	52.00	10.100	27.600	139.800
3/16/81	1:55:14	-15 25.174'	75 54.519'	4	20.062	23.241	8.487	139.07	24.158	50.574	52.00	7.700	17.000	190.200
3/16/81	2:10:16	-15 25.174'	75 54.519'	4	19.159	23.414	16.771	197.11	24.118	288.700	52.00	2.600	17.200	130.500
3/16/81	2:25:16	-15 25.174'	75 54.519'	4	19.810	23.183	8.288	132.10	24.096	56.997	52.00	5.500	8.500	190.500
3/16/81	2:40:16	-15 25.174'	75 54.519'	4	19.364	23.180	3.793	135.48	24.019	56.540	52.00	5.500	4.900	193.300
3/16/81	2:55:16	-15 24.133'	75 56.486'	3	19.139	23.174	8.438	135.79	23.983	51.148	228.00	5.500	8.600	182.800
3/16/81	3:10:16	-15 23.854'	75 58.221'	3	20.127	23.180	22.174	162.37	23.944	256.390	244.00	5.500	22.300	53.700
3/16/81	3:25:16	-15 23.854'	75 58.221'	3	18.908	23.183	20.288	209.62	23.927	293.840	244.00	5.500	18.300	146.600
3/16/81	3:40:16	-15 23.854'	75 58.221'	3	19.819	23.132	6.302	129.99	23.909	63.163	244.00	5.500	5.000	201.600
3/16/81	3:55:16	-15 23.854'	75 58.221'	3	19.647	23.178	21.528	166.05	23.859	257.910	244.00	4.400	21.100	56.700
3/16/81	4:10:16	-15 23.854'	75 58.221'	3	19.323	23.165	6.379	134.04	23.817	61.995	244.00	5.500	6.500	201.500
3/16/81	4:25:16	-15 23.854'	75 58.221'	3	18.684	23.179	15.376	312.40	23.758	255.580	244.00	5.500	14.700	201.500

C COMPLETED SAMPLES STEAMING FOR ATMOSPHERIC SAMPLES 04:29 Z

3/16/81	4:40:18	-15 22.035'	75 58.211'	3	19.111	23.173	26.990	348.66	23.745	173.230	410.00	600	26.500	162.500
3/16/81	4:55:18	-15 21.544'	76 1.175'	5	19.255	23.180	28.039	331.57	23.838	191.160	432.00	3.100	25.200	159.200
3/16/81	5:10:19	-15 21.544'	76 1.175'	5	19.125	23.009	27.198	342.79	23.902	187.420	432.00	3.300	23.600	172.800
3/16/81	5:25:20	-15 21.544'	76 1.175'	5	19.111	23.023	27.626	342.10	23.974	187.270	432.00	3.300	24.100	167.500
3/16/81	5:40:20	-15 24.099'	76 3.042'	3	18.914	23.119	25.840	339.85	23.978	188.890	512.00	3.200	23.100	166.300
3/16/81	5:55:21	-15 24.099'	76 3.042'	3	19.101	23.138	25.116	341.31	24.020	187.410	512.00	3.200	21.500	165.900
3/16/81	6:10:23	-15 24.099'	76 3.042'	3	18.749	23.006	27.625	345.12	24.089	185.200	512.00	3.200	24.500	167.800
3/16/81	6:25:23	-15 26.176'	76 4.921'	8	19.081	23.155	25.032	342.39	24.198	186.010	600.00	3.200	22.200	164.700
3/16/81	6:40:26	-15 26.176'	76 4.921'	8	19.024	23.116	25.457	344.67	24.249	185.160	600.00	3.400	22.000	167.300
3/16/81	6:55:29	-15 26.176'	76 4.921'	8	18.682	22.998	27.436	345.04	24.278	187.030	600.00	3.400	24.100	169.700
3/16/81	7:10:32	-15 26.176'	76 4.921'	8	19.080	22.990	25.670	342.85	24.282	186.520	600.00	3.400	22.400	165.900
3/16/81	7:25:35	-15 29.773'	76 6.960'	3	18.858	22.877	26.373	344.02	24.263	188.450	702.00	3.400	23.400	171.000
3/16/81	7:40:39	-15 29.773'	76 6.960'	3	18.666	22.869	25.612	343.25	24.259	189.480	702.00	3.400	22.600	171.100
3/16/81	7:55:41	-15 32.453'	76 8.316'	4	18.806	22.997	26.171	346.64	24.329	185.810	742.00	3.400	22.800	170.600
3/16/81	8:10:44	-15 32.453'	76 8.316'	4	18.676	23.091	25.980	340.24	24.381	187.240	742.00	3.400	22.100	171.300
3/16/81	8:25:47	-15 32.453'	76 8.316'	4	18.425	22.884	25.461	348.35	24.368	187.510	742.00	3.400	21.500	171.700
3/16/81	8:40:50	-15 32.453'	76 8.316'	4	18.362	22.958	25.137	351.04	24.376	182.260	742.00	3.400	20.600	166.300
3/16/81	8:55:53	-15 32.453'	76 8.316'	4	18.666	23.000	24.078	344.25	24.403	185.330	742.00	3.400	22.800	167.500
3/16/81	9:10:56	-15 32.453'	76 8.316'	4	18.454	23.113	25.943	339.55	24.407	191.050	742.00	3.400	20.600	167.200
3/16/81	9:25:59	-15 32.453'	76 8.316'	4	18.717	22.907	24.010	340.74	24.434	183.640	742.00	3.400	20.600	167.200
3/16/81	9:41:5	-15 32.453'	76 8.316'	4	18.402	23.114	24.041	333.78	24.411	191.160	742.00	3.400	21.000	161.200
3/16/81	9:56:7	-15 37.830'	76 9.693'	4	18.259	23.000	24.417	335.33	24.437	190.850	926.00	3.200	21.300	163.500
3/16/81	10:11:7	-15 37.830'	76 9.693'	4	18.075	23.042	23.723	334.21	24.362	191.140	926.00	3.200	20.800	161.400

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEMPOIN	AIRTEMP	APPROXSP	SEATEMP	CYRONED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
3/16/81	10:26	7	-15 37.830'	76	9.693'	4	18.362	23.129	21.718	335.85	24.346	188.750	926.00
3/16/81	10:41	7	-15 37.830'	76	9.693'	4	18.212	23.018	24.556	338.25	24.365	189.280	926.00
3/16/81	10:56	7	-15 41.920'	76	13.784'	3	18.858	23.171	22.623	337.23	24.319	187.680	1034.00
3/16/81	11:11	7	-15 41.920'	76	13.784'	3	17.872	22.998	23.137	341.81	24.257	185.310	1034.00
3/16/81	11:26	7	-15 41.920'	76	13.784'	3	18.423	23.000	23.847	335.47	24.192	191.050	1034.00
3/16/81	11:41	7	-15 44.047'	76	15.116'	6	17.990	22.985	7.304	240.04	24.189	75.873	1114.00
3/16/81	11:56	7	-15 44.047'	76	15.116'	6	18.112	22.839	1.453	218.98	24.182	47.792	1114.00
3/16/81	12:11	7	-15 44.047'	76	15.116'	6	18.875	23.002	2.684	196.04	24.272	49.115	1114.00
3/16/81	12:26	7	-15 40.717'	76	10.137'	3	19.333	23.293	4.161	148.07	24.482	48.224	1220.00
3/16/81	12:41	7	-15 40.717'	76	10.137'	3	19.164	23.181	1.896	240.94	24.446	46.288	1220.00
3/16/81	13:11	8	-15 40.717'	76	10.137'	3	18.887	23.302	2.902	206.29	24.508	51.192	1220.00
3/16/81	13:26	8	-15 40.717'	76	10.137'	3	19.039	23.468	2.208	249.67	24.543	52.776	1220.00
3/16/81	13:41	8	-15 40.717'	76	10.137'	3	20.301	23.479	4.280	128.52	24.294	165.840	1220.00
3/16/81	13:56	8	-15 40.717'	76	10.137'	3	20.799	23.704	7.672	129.77	24.207	357.970	1220.00
3/16/81	14:11	8	-15 40.717'	76	10.137'	3	18.192	23.818	7.724	248.04	24.027	79.054	1220.00
3/16/81	14:26	8	-15 40.717'	76	10.137'	3	19.216	23.418	22.037	373.70	23.946	75.626	1220.00
3/16/81	14:41	8	-15 40.717'	76	10.137'	3	19.995	23.804	35.318	350.74	23.896	165.560	1220.00
3/16/81	14:56	8	-15 40.717'	76	10.137'	3	20.439	23.427	3.972	136.41	24.043	69.508	1220.00

C STOPPED STEERING TO GATHER HYDRO CASTS WEATHER TO ROUGH FOR ZODIACS

3/16/81	15:11	9	-15 40.717'	76	10.137'	3	20.381	23.498	4.651	138.63	24.083	64.782	1220.00	200	4.500	206.000
3/16/81	15:26	9	-15 40.717'	76	10.137'	3	20.745	23.546	5.768	126.08	24.045	60.689	1220.00	700	4.800	192.700
3/16/81	15:41	9	-15 40.717'	76	10.137'	3	20.861	23.699	21.551	162.70	23.987	296.880	1220.00	700	21.000	98.000
3/16/81	15:56	9	-15 40.717'	76	10.137'	3	19.884	23.957	17.938	187.47	23.991	322.450	1220.00	700	19.800	132.300
3/16/81	16:11	9	-15 40.717'	76	10.137'	3	19.302	24.257	13.467	165.67	23.998	319.150	1220.00	700	14.900	142.700
3/16/81	16:26	9	-15 26.411'	75	56.247'	3	19.636	23.770	2.964	163.52	23.955	64.410	1554.00	700	2.500	231.700
3/16/81	16:41	9	-15 26.411'	75	56.247'	3	20.222	23.317	2.696	139.43	23.920	33.146	1554.00	700	3.400	174.700
3/16/81	16:56	9	-15 26.411'	75	56.247'	3	20.215	23.489	2.359	144.05	23.936	35.015	1554.00	700	2.700	194.500
3/16/81	17:11	9	-15 26.411'	75	56.247'	3	20.151	23.360	3.351	130.34	23.946	41.732	1554.00	700	3.700	169.200
3/16/81	17:26	9	-15 25.413'	75	57.562'	3	20.413	23.360	3.884	107.58	23.920	42.855	1656.00	700	4.300	166.400
3/16/81	17:41	9	-15 25.413'	75	57.562'	3	20.425	23.360	3.631	148.38	23.882	61.902	1656.00	700	4.000	196.400
3/16/81	17:56	9	-15 25.413'	75	57.562'	3	20.195	23.516	3.148	144.84	23.848	60.562	1656.00	700	4.100	196.400
3/16/81	18:11	9	-15 24.860'	75	58.649'	4	19.800	24.779	32.751	365.99	23.875	129.890	1744.00	10.300	22.700	138.800
3/16/81	18:26	9	-15 24.860'	75	58.649'	4	19.776	25.159	33.618	366.21	24.005	129.230	1744.00	10.200	23.500	138.000
3/16/81	18:41	9	-15 24.860'	75	58.649'	4	19.996	25.338	33.813	364.11	24.115	129.850	1744.00	10.300	22.000	135.800
3/16/81	18:56	9	-15 24.860'	75	58.649'	4	19.764	24.345	2.577	208.64	24.209	71.571	1744.00	10.200	11.700	268.300
3/16/81	19:11	9	-15 29.515'	75	52.914'	3	20.188	23.707	4.390	157.86	24.200	52.975	1844.00	10.300	14.500	219.100
3/16/81	19:26	9	-15 29.515'	75	52.914'	3	20.140	23.588	2.778	146.71	24.143	54.981	1844.00	10.300	13.900	228.700
3/16/81	19:41	9	-15 29.515'	75	52.914'	3	19.999	23.653	3.231	105.40	24.098	51.310	1844.00	10.300	10.800	222.300
3/16/81	19:56	9	-15 29.515'	75	52.914'	3	19.849	23.527	3.346	116.37	24.076	55.872	1844.00	800	3.100	192.800
3/16/81	20:11	11	-15 29.515'	75	52.914'	3	19.637	23.505	2.859	131.13	24.067	27.370	1844.00	800	3.100	168.900
3/16/81	20:26	11	-15 29.515'	75	52.914'	3	19.562	23.556	2.940	126.24	24.064	56.086	1844.00	800	3.400	188.000
3/16/81	20:41	11	-15 29.515'	75	52.914'	3	19.777	23.564	5.233	135.62	24.037	50.980	1844.00	800	6.700	199.900
3/16/81	20:56	11	-15 29.515'	75	52.914'	3	20.338	23.564	20.304	158.17	24.033	298.010	1844.00	800	21.800	92.400
3/16/81	21:11	11	-15 29.515'	75	52.914'	3	19.761	23.548	5.770	172.94	24.026	131.110	1844.00	800	9.000	310.900
3/16/81	21:26	11	-15 29.515'	75	53.520'	3	18.806	24.110	21.138	384.91	23.982	111.210	2112.00	800	3.600	247.200
3/16/81	21:41	11	-15 27.911'	75	53.520'	3	18.666	24.079	18.337	388.42	23.971	108.480	2112.00	900	18.600	134.700
3/16/81	21:56	11	-15 27.911'	75	53.520'	3	18.685	23.718	24.643	379.14	23.990	124.820	2112.00	800	26.500	135.200
3/16/81	22:11	11	-15 27.911'	75	53.520'	3	18.771	23.755	7.797	229.40	23.945	97.357	2112.00	900	10.600	6.000
3/16/81	22:26	11	-15 27.911'	75	53.520'	3	18.392	23.345	2.310	284.37	23.883	81.036	2218.00	800	2.600	324.700
3/16/81	22:41	11	-15 27.023'	75	53.472'	3	18.472	23.303	2.815	166.13	23.831	88.929	2218.00	800	3.200	253.600
3/16/81	22:56	11	-15 27.023'	75	53.472'	3	18.234	23.303	9.033	211.24	23.739	100.010	2218.00	800	11.500	344.900
3/16/81	23:11	11	-15 27.121'	75	53.798'	3	19.375	23.023	9.483	136.02	23.646	53.054	2258.00	800	9.400	197.200
3/16/81	23:26	12	-15 27.121'	75	53.798'	3	19.393	23.067	4.826	134.32	23.562	53.453	2258.00	800	4.100	206.400
3/16/81	23:41	12	-15 27.121'	75	53.798'	3	19.525	23.196	8.081	135.03	23.489	49.356	2258.00	800	7.100	194.600
3/16/81	23:56	12	-15 27.121'	75	53.798'	3	19.585	23.045	3.738	133.98	23.369	54.601	2258.00	800	3.200	201.700
3/16/81	0:11	12	-15 27.121'	75	53.798'	3	19.585	23.045	5.837	135.06	23.242	52.345	2	800	7.100	190.700
3/17/81	0:26	12	-15 25.411'	75	55.091'	3	19.333	23.139								

DATE TIME DEG. MIN-LAT DEG. MIN-LNG FIX DEWPOINT AIRTEMP APPRNSP APPRUPR SEATEMP GYROHED ZULUFIX MANUSPD TRWDSPD TRWDDIR

3/17/81	0:41:12	-15 25 411'	75 55 091'	3	19 566	23 130	5 557	133 85	23 127	53 064	2 00	800	7 400	192 800
3/17/81	0:56:12	-15 25 411'	75 55 091'	3	19 969	23 138	6 301	134 04	23 032	53 433	2 00	800	6 300	165 600
3/17/81	1:11:12	-15 25 411'	75 55 091'	3	19 829	23 059	5 154	131 60	22 948	48 650	2 00	900	5 600	194 800
3/17/81	1:26:12	-15 25 411'	75 55 091'	3	19 477	23 137	5 235	147 50	22 865	59 777	2 00	800	5 900	210 500
3/17/81	1:41:12	-15 25 411'	75 55 091'	3	19 566	23 019	5 420	143 73	22 829	55 295	2 00	800	5 400	205 900
3/17/81	1:56:12	-15 23 225'	75 56 627'	3	20 105	23 180	20 733	145 13	22 790	191 920	140 00	800	16 500	330 800
3/17/81	2:11:12	-15 23 225'	75 56 627'	3	20 467	23 196	13 839	144 76	22 783	58 150	140 00	800	16 700	198 000
3/17/81	2:26:12	-15 23 225'	75 56 627'	3	19 804	23 051	9 703	136 51	22 739	44 117	140 00	800	7 000	180 400
3/17/81	2:41:12	-15 23 225'	75 56 627'	3	19 803	23 008	3 928	143 09	22 697	49 610	140 00	800	5 500	200 900
3/17/81	2:56:12	-15 23 225'	75 56 627'	3	19 715	22 461	4 159	137 02	22 635	36 506	140 00	900	5 000	196 800
3/17/81	3:11:12	-15 23 225'	75 56 627'	3	19 726	22 444	7 392	132 05	22 607	33 891	140 00	800	5 400	171 000
3/17/81	3:26:12	-15 23 225'	75 56 627'	3	19 293	22 637	22 444	153 18	22 569	316 110	140 00	800	22 900	115 000
3/17/81	3:41:12	-15 23 225'	75 56 627'	3	19 782	22 579	4 197	128 78	22 587	31 457	140 00	800	4 400	175 200
3/17/81	3:56:12	-15 23 225'	75 56 627'	3	19 676	22 582	4 404	126 79	22 571	42 376	140 00	800	5 300	185 200
3/17/81	4:11:12	-15 23 225'	75 56 627'	3	19 755	22 526	3 866	138 37	22 570	41 403	140 00	800	5 000	185 300
3/17/81	4:26:12	-15 23 225'	75 56 627'	3	18 884	22 460	2 366	260 47	22 520	66 362	140 00	800	3 000	302 100
3/17/81	4:41:12	-15 20 616'	75 59 345'	3	19 369	22 460	2 609	252 10	22 449	61 152	424 00	800	2 900	299 600

C STEAMING FOR ATMOSPHERIC SAMPLES

3/17/81	4:56:13	-15 20 616'	75 59 345'	3	19 084	22 460	22 298	382 17	22 386	94 119	424 00	1 400	20 500	116 400
3/17/81	5:11:13	-15 20 616'	75 59 345'	3	18 662	22 453	21 023	388 42	22 274	83 133	424 00	1 400	19 200	114 200
3/17/81	5:26:13	-15 19 444'	75 58 919'	3	18 958	22 280	23 264	368 71	22 202	97 040	508 00	1 400	22 700	109 500
3/17/81	5:41:13	-15 19 444'	75 58 919'	3	18 655	22 116	24 548	375 89	22 107	95 860	508 00	1 300	23 000	112 300
3/17/81	5:56:13	-15 19 444'	75 58 919'	3	18 442	22 058	23 470	377 09	22 050	97 021	508 00	3 200	20 500	115 000
3/17/81	6:11:13	-15 19 444'	75 58 919'	3	18 445	21 920	23 649	375 59	21 968	98 451	508 00	3 200	21 100	116 700
3/17/81	6:26:13	-15 19 144'	75 56 809'	4	18 223	21 920	25 367	383 97	21 792	95 829	608 00	3 200	22 500	121 900
3/17/81	6:41:13	-15 19 144'	75 56 809'	4	18 301	21 920	20 482	371 98	21 510	106 300	608 00	3 600	18 800	116 300
3/17/81	6:56:13	-15 19 144'	75 56 809'	4	18 355	21 920	20 482	371 98	21 510	106 300	608 00	3 600	17 500	119 700
3/17/81	7:11:13	-15 19 144'	75 56 809'	4	18 233	21 764	373 46	373 46	21 347	103 470	608 00	3 600	18 500	116 200
3/17/81	7:26:13	-15 19 144'	75 56 809'	4	17 999	21 734	21 615	369 94	21 264	102 800	608 00	3 600	17 900	115 900
3/17/81	7:41:13	-15 19 144'	75 56 809'	4	18 050	21 405	21 354	361 69	21 228	105 410	608 00	3 700	17 800	108 800
3/17/81	7:56:13	-15 19 144'	75 56 809'	4	17 797	21 364	20 658	362 83	21 255	106 350	608 00	3 700	17 300	110 300
3/17/81	8:11:13	-15 19 144'	75 56 809'	4	17 777	21 207	21 337	364 87	21 237	105 270	608 00	3 700	17 500	111 200
3/17/81	8:26:13	-15 19 144'	75 56 809'	4	17 554	21 200	21 885	364 71	21 172	103 690	608 00	3 600	19 600	108 600
3/17/81	8:41:13	-15 19 144'	75 56 809'	4	17 482	21 043	22 988	362 87	21 164	104 130	608 00	3 700	20 300	107 700
3/17/81	8:56:13	-15 20 035'	75 49 995'	3	17 473	20 840	24 690	361 93	21 259	105 170	836 00	3 700	20 600	108 500
3/17/81	9:11:13	-15 20 035'	75 49 995'	3	17 141	20 834	22 631	363 45	21 365	105 110	836 00	3 700	19 100	107 400
3/17/81	9:26:13	-15 20 035'	75 49 995'	3	17 118	20 782	22 485	365 37	21 437	103 070	836 00	3 900	18 200	109 500
3/17/81	9:41:13	-15 20 035'	75 49 995'	3	17 118	20 839	24 392	367 50	21 441	103 450	836 00	3 900	20 200	111 500
3/17/81	9:56:13	-15 20 035'	75 49 995'	3	16 711	20 834	5 997	195 11	21 395	57 820	836 00	3 900	10 800	252 300
3/17/81	10:11:15	-15 20 035'	75 49 995'	3	16 087	20 309	1 780	257 71	21 044	42 423	836 00	3 900	4 000	253 400
3/17/81	10:26:15	-15 20 035'	75 49 995'	3	16 260	20 078	18 718	339 55	20 552	91 424	836 00	3 900	14 000	55 300
3/17/81	10:41:15	-15 19 269'	75 44 896'	3	16 444	19 826	20 295	363 74	20 353	105 310	1022 00	3 000	16 900	109 600
3/17/81	10:56:15	-15 19 269'	75 44 896'	3	16 230	19 892	21 259	364 43	20 293	105 890	1022 00	3 100	18 800	111 500
3/17/81	11:11:15	-15 19 269'	75 44 896'	3	16 001	19 919	20 459	366 10	20 231	104 410	1022 00	3 100	17 600	110 900
3/17/81	11:26:15	-15 19 269'	75 44 896'	3	16 004	19 760	21 639	366 57	20 208	104 680	1022 00	3 000	18 800	112 600
3/17/81	11:41:15	-15 19 269'	75 44 896'	3	15 999	19 760	22 328	370 39	20 197	103 730	1022 00	2 500	19 600	115 300
3/17/81	11:56:16	-15 19 653'	75 42 574'	3	15 969	19 781	21 196	378 68	20 091	80 820	1130 00	2 600	18 000	108 400
3/17/81	12:11:16	-15 19 653'	75 42 574'	3	15 548	19 940	22 921	355 05	20 046	120 990	1130 00	2 600	19 200	125 700
3/17/81	12:26:16	-15 19 653'	75 42 574'	3	16 651	20 494	15 137	308 52	20 975	233 130	1130 00	2 500	13 500	172 400
3/17/81	12:41:16	-15 19 653'	75 42 574'	3	17 084	21 020	13 502	304 99	21 321	231 520	1130 00	2 600	11 700	166 100
3/17/81	12:56:16	-15 19 653'	75 42 574'	3	17 492	21 675	14 857	305 75	22 109	231 970	1130 00	2 500	13 700	165 900
3/17/81	13:11:16	-15 19 653'	75 42 574'	3	17 555	22 097	7 181	340 54	23 071	233 090	1130 00	2 500	3 500	221 100
3/17/81	13:26:16	-15 19 653'	75 42 574'	3	19 106	22 753	20 496	315 18	23 689	196 840	1130 00	2 500	19 000	149 300

C BACK ON STATION 2 FOR MORE HYDRO CAST AND MAYBE SOME ZODIAK WORK

C DEEP CAST AND ZODIAKS WILL BE USED

DATE TIME DEG. MIN-LAT DEG. MIN-LNG FIX DENPOIN AIRTEMP APPRWSP APPRWDR SEATEMP CYRCHED ZULUFIX MANLSPD TRWDSPD TRWDIDR

3/17/81	13:41:16	-15 26.731'	75 52.218'	3	19.110	22.462	4.335	146.07	23.828	24.290	1316.00	800	4.900	173.500
3/17/81	13:56:16	-15 26.731'	75 52.218'	3	18.645	22.639	3.649	132.06	23.874	23.007	1316.00	800	4.700	167.000
3/17/81	14:11:16	-15 26.731'	75 52.218'	3	18.595	22.640	1.811	155.68	23.877	23.809	1316.00	800	2.800	203.700
3/17/81	14:26:16	-15 26.731'	75 52.218'	3	18.869	22.825	2.825	122.20	23.850	28.901	1316.00	800	3.100	158.100
3/17/81	14:41:16	-15 26.731'	75 52.218'	3	19.215	22.984	21.850	170.57	23.868	276.760	1316.00	900	22.500	85.200
3/17/81	14:56:16	-15 26.731'	75 52.218'	3	18.677	23.293	19.721	190.69	23.876	276.710	1316.00	800	21.600	103.500
3/17/81	15:11:16	-15 26.731'	75 52.218'	3	20.033	23.179	9.271	131.53	23.907	53.202	1316.00	800	10.700	191.900
3/17/81	15:26:16	-15 27.969'	75 54.895'	4	19.528	23.060	4.145	126.37	23.878	34.029	1458.00	800	4.900	171.700
3/17/81	15:41:16	-15 27.969'	75 54.895'	4	19.340	23.199	1.628	118.44	23.850	33.639	1458.00	800	2.400	176.200
3/17/81	15:56:16	-15 27.969'	75 54.895'	4	19.122	23.156	3.743	123.40	23.799	33.111	1458.00	800	3.600	169.200
3/17/81	16:11:16	-15 27.969'	75 54.895'	4	17.187	23.179	4.001	134.96	23.747	42.315	1458.00	800	4.900	186.900
3/17/81	16:26:16	-15 26.724'	75 56.855'	3	19.333	23.201	2.848	234.05	23.725	36.422	1608.00	800	2.700	213.600
3/17/81	16:41:16	-15 26.724'	75 56.855'	3	19.048	23.360	2.146	125.58	23.660	41.155	1608.00	800	5.400	185.500
3/17/81	16:56:16	-15 26.724'	75 56.855'	3	18.889	23.360	6.412	138.81	23.632	38.831	1654.00	800	6.300	185.000
3/17/81	17:11:16	-15 26.346'	75 58.118'	3	19.363	23.359	5.632	139.06	23.605	41.719	1654.00	800	5.900	183.300
3/17/81	17:26:16	-15 26.346'	75 58.118'	3	20.318	23.656	18.610	155.69	23.619	272.330	1654.00	800	19.500	65.100
3/17/81	17:41:16	-15 26.346'	75 58.118'	3	18.358	23.839	13.174	217.43	23.617	277.950	1654.00	800	13.100	134.200
3/17/81	17:56:16	-15 26.346'	75 58.118'	3	18.211	23.703	18.166	200.80	23.624	295.490	1750.00	800	19.900	131.700
3/17/81	18:11:16	-15 26.047'	75 58.744'	3	19.965	23.385	7.698	128.85	23.627	43.726	1750.00	800	8.500	178.200
3/17/81	18:26:16	-15 26.047'	75 58.744'	3	19.191	23.180	4.752	123.06	23.585	50.921	1750.00	800	4.100	177.000
3/17/81	18:41:16	-15 26.047'	75 58.744'	3	19.488	23.179	5.514	130.64	23.539	58.934	1750.00	800	6.400	200.800
3/17/81	18:56:16	-15 26.047'	75 58.744'	3	19.488	23.179	5.514	130.64	23.539	58.934	1750.00	800	6.400	200.800

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WIND COMING OFF STARBOARD SI

3/17/81	19:11:18	-15 26.047'	75 58.744'	3	19.396	23.186	2.566	171.07	23.458	65.562	1750.00	800	4.000	253.800
3/17/81	19:26:21	-15 26.047'	75 58.744'	3	19.261	23.157	6.192	143.36	23.385	55.137	1750.00	800	6.300	191.600
3/17/81	19:41:24	-15 26.047'	75 58.744'	3	18.659	23.129	2.909	144.40	23.329	61.854	1750.00	800	4.200	218.300
3/17/81	19:56:27	-15 26.047'	75 58.744'	3	18.456	23.114	2.754	157.63	23.270	64.719	1750.00	800	3.500	221.600
3/17/81	20:11:30	-15 26.047'	75 58.744'	3	19.103	23.049	3.246	125.36	23.178	67.040	1750.00	900	3.600	205.800
3/17/81	20:26:33	-15 26.047'	75 58.744'	3	18.614	23.000	4.709	136.14	23.055	64.187	1750.00	800	5.200	214.100
3/17/81	20:41:36	-15 23.663'	76 1.033'	3	18.359	23.042	3.273	125.69	22.957	63.309	2020.00	900	3.200	202.000
3/17/81	20:56:39	-15 23.663'	76 1.033'	3	18.086	23.155	4.371	120.87	22.812	68.946	2020.00	900	4.700	200.200
3/17/81	21:11:42	-15 23.663'	76 1.033'	3	18.818	23.002	2.436	143.34	22.747	62.085	2020.00	800	3.700	218.700
3/17/81	21:26:45	-15 23.663'	76 1.033'	3	18.292	23.359	26.272	369.21	22.601	132.690	2020.00	3.500	22.700	138.600

C STATION 2 COMPLETED STEAMING FOR ATMOSPHERIC SAMPLES

3/17/81	21:41:46	-15 23.663'	76 1.033'	3	17.776	23.247	25.486	380.01	22.652	120.350	2020.00	3.500	21.300	143.900
3/17/81	21:56:47	-15 23.663'	76 1.033'	3	17.424	23.300	26.237	381.33	22.663	119.290	2020.00	3.500	22.800	145.400
3/17/81	22:11:47	-15 23.663'	76 1.033'	3	17.423	23.180	24.903	390.12	22.626	105.480	2020.00	3.500	20.700	141.500
3/17/81	22:26:48	-15 23.663'	76 1.033'	3	17.059	23.000	19.432	394.40	22.573	104.950	2020.00	3.500	14.500	148.900
3/17/81	22:41:48	-15 23.637'	76 0.666'	3	17.334	22.878	17.731	398.40	22.528	105.750	2206.00	3.700	16.400	151.300
3/17/81	22:56:50	-15 23.637'	76 0.666'	3	17.766	22.825	26.188	384.59	22.582	107.620	2206.00	3.700	22.000	133.100
3/17/81	23:11:50	-15 23.637'	76 0.666'	3	17.503	22.820	22.941	391.85	22.617	107.970	2206.00	3.700	17.600	146.300
3/17/81	23:26:50	-15 23.637'	76 0.666'	3	17.776	22.821	24.388	390.22	22.609	107.210	2206.00	3.700	22.000	140.900
3/17/81	23:41:50	-15 24.017'	75 57.277'	3	17.362	22.818	28.169	389.80	22.567	109.700	2314.00	3.800	25.300	142.600
3/17/81	23:56:50	-15 24.017'	75 57.277'	3	17.917	22.807	27.821	387.63	22.613	107.760	2314.00	3.700	24.200	139.000
3/17/81	0:11:50	-15 24.017'	75 57.277'	3	17.748	22.820	25.260	391.00	22.621	105.780	2314.00	3.700	22.400	142.000
3/18/81	0:26:50	-15 24.017'	75 57.277'	3	18.019	22.820	23.425	389.19	22.602	106.870	2314.00	3.700	22.400	141.400
3/18/81	0:41:50	-15 24.017'	75 57.277'	3	17.999	22.805	27.286	392.84	22.648	109.480	2314.00	3.700	18.900	149.200
3/18/81	0:56:50	-15 24.017'	75 57.277'	3	17.771	22.536	21.812	364.71	22.859	109.090	2314.00	3.700	17.800	114.700
3/18/81	1:11:50	-15 24.017'	75 53.147'	3	18.747	22.280	21.175	372.69	22.878	103.520	102.00	3.000	17.700	111.700
3/18/81	1:26:50	-15 24.621'	75 53.147'	3	18.646	22.160	20.137	376.63	22.839	90.570	102.00	2.000	17.900	110.800
3/18/81	1:41:50	-15 24.621'	75 53.147'	3	18.274	21.987	23.692	372.77	22.636	90.850	102.00	2.100	21.800	105.900
3/18/81	1:56:50	-15 24.621'	75 53.147'	3	18.274	21.987	23.692	372.77	22.636	90.850	102.00	2.000	18.200	108.800
3/18/81	2:11:50	-15 24.621'	75 53.147'	3	18.222	21.920	20.484	377.58	22.384	88.859	102.00	2.000	19.800	108.600
3/18/81	2:26:50	-15 24.621'	75 53.147'	3	18.011	21.741	21.107	377.59	22.129	83.383	102.00	2.000	19.800	108.600
3/18/81	2:41:50	-15 24.325'	75 51.126'	3	17.999	21.627	22.132	374.86	21.958	92.246	214.00	2.000	20.000	109.300
3/18/81	2:56:50	-15 24.049'	75 50.834'	2	17.695	21.603	22.996	377.09	21.767	87.874	234.00	2.000	21.000	106.000

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DATE	TIME	DEG. MIN.-LAT	DEG. MIN.-LONG	FIX	DEWPOINT	AIRTEMP	APPRNSP	APPROR	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
3/18/81	3:11:50	-15 24.049'	75 50.834'	2	17.337	21.562	22.423	376.65	21.635	88.555	234.00	2.000	20.600	106.300
3/18/81	3:26:50	-15 24.049'	75 50.834'	2	17.555	21.581	20.928	369.88	21.496	92.822	234.00	2.000	19.600	105.100
3/18/81	3:41:50	-15 24.049'	75 50.834'	2	17.332	21.566	21.647	380.01	21.380	87.299	234.00	2.000	20.200	109.300
3/18/81	3:56:50	-15 23.266'	75 49.789'	7	17.111	21.447	21.992	382.30	21.226	87.164	332.00	2.000	20.000	112.200
3/18/81	4:11:50	-15 23.266'	75 49.789'	7	16.912	21.380	21.538	383.46	21.093	88.339	332.00	2.000	19.500	115.300
3/18/81	4:26:50	-15 22.872'	75 48.787'	3	17.325	21.201	19.628	378.66	20.938	90.443	400.00	2.000	17.800	112.000
3/18/81	4:41:50	-15 22.713'	75 48.551'	2	17.082	21.020	19.710	379.72	20.819	85.731	420.00	2.300	17.800	108.600
3/18/81	4:56:50	-15 22.713'	75 48.551'	2	16.888	20.907	20.474	380.74	20.687	88.573	420.00	2.200	18.400	110.500
3/18/81	5:11:50	-15 22.713'	75 48.551'	2	16.895	20.834	20.834	380.48	20.579	88.169	420.00	2.200	18.700	110.800
3/18/81	5:26:50	-15 22.713'	75 48.551'	2	17.047	20.995	22.382	379.19	20.517	88.496	420.00	2.300	20.400	109.100
3/18/81	5:41:50	-15 22.309'	75 48.258'	3	16.888	20.840	21.171	383.02	20.430	88.048	516.00	2.300	18.700	114.700
3/18/81	5:56:50	-15 22.309'	75 48.258'	3	17.058	20.660	19.664	377.68	20.304	85.910	516.00	2.200	17.300	113.800
3/18/81	6:11:50	-15 22.309'	75 48.258'	3	16.666	20.651	19.620	377.19	20.271	89.236	516.00	2.300	17.500	104.900
3/18/81	6:26:50	-15 22.309'	75 48.258'	3	16.666	20.651	19.620	377.19	20.259	89.066	516.00	2.200	17.100	108.200
3/18/81	6:41:50	-15 22.309'	75 48.258'	3	16.466	20.486	18.375	373.60	20.229	88.955	516.00	2.300	16.100	104.200
3/18/81	6:56:50	-15 22.309'	75 48.258'	3	16.385	20.480	19.783	373.69	20.228	89.635	516.00	2.200	17.600	105.700
3/18/81	7:11:50	-15 22.309'	75 48.258'	3	16.222	20.420	17.500	373.28	20.220	91.558	704.00	2.300	15.300	106.300
3/18/81	7:26:50	-15 21.523'	75 44.342'	3	16.000	20.360	16.745	377.59	20.161	89.730	704.00	2.300	14.200	109.100
3/18/81	7:41:50	-15 21.015'	75 43.458'	6	16.061	20.300	14.349	377.86	20.062	90.273	748.00	2.200	12.400	111.500
3/18/81	7:56:50	-15 21.015'	75 43.458'	6	15.999	20.256	13.960	379.59	19.965	91.019	748.00	2.200	12.100	115.800
3/18/81	8:11:50	-15 21.015'	75 43.458'	6	15.778	20.114	14.552	379.45	19.706	89.278	748.00	2.200	13.000	114.900
3/18/81	8:26:50	-15 21.015'	75 43.458'	6	15.778	20.114	14.552	379.45	19.706	89.278	748.00	2.200	12.500	115.200
3/18/81	8:41:50	-15 21.015'	75 43.458'	6	15.796	19.940	14.422	380.07	19.644	89.960	748.00	2.200	12.500	115.200
3/18/81	8:56:50	-15 21.015'	75 43.458'	6	15.999	19.940	14.283	379.47	19.616	86.873	748.00	2.300	11.900	110.300
3/18/81	9:11:50	-15 21.015'	75 43.458'	6	15.972	19.896	13.176	370.93	19.575	90.035	748.00	2.300	10.800	103.500
3/18/81	9:26:50	-15 20.086'	75 39.593'	4	15.637	19.760	15.032	382.42	19.556	87.927	932.00	2.300	12.700	113.200
3/18/81	9:41:50	-15 20.086'	75 39.593'	4	15.777	19.760	13.768	384.68	19.505	89.916	932.00	2.200	11.800	118.500
3/18/81	10:11:50	-15 20.086'	75 39.593'	4	15.777	19.760	13.457	385.03	19.529	89.045	932.00	2.200	11.400	112.400
3/18/81	10:26:50	-15 20.086'	75 39.593'	4	15.555	19.623	12.944	380.13	19.671	86.337	932.00	2.200	13.100	67.900
3/18/81	10:41:50	-15 20.086'	75 39.593'	4	15.336	19.580	13.264	379.50	19.772	48.060	932.00	2.200	12.100	112.200
3/18/81	10:56:50	-15 19.460'	75 37.288'	4	15.503	19.580	14.611	379.56	19.694	87.845	1042.00	2.700	12.000	107.000
3/18/81	11:11:50	-15 19.460'	75 37.288'	4	15.484	19.401	14.835	373.73	19.564	90.110	1042.00	2.700	12.000	107.000
3/18/81	11:26:50	-15 19.460'	75 37.288'	4	15.333	19.400	13.855	372.84	19.596	88.726	1042.00	2.700	11.300	105.900
3/18/81	11:41:50	-15 19.460'	75 37.288'	4	15.251	19.400	14.370	374.56	19.537	89.332	1042.00	2.700	11.800	106.700
3/18/81	11:56:50	-15 19.460'	75 37.288'	4	14.313	19.220	9.268	398.66	19.165	21.899	1042.00	2.700	7.700	72.200
3/18/81	12:11:50	-15 19.460'	75 37.288'	4	13.639	19.220	4.888	139.73	18.303	21.592	1042.00	2.700	7.700	185.400
3/18/81	12:26:50	-15 19.460'	75 37.288'	4	12.450	17.979	16.251	397.80	17.141	20.958	1042.00	11.300	9.700	104.100
3/18/81	12:41:50	-15 19.460'	75 37.288'	4	12.443	17.961	6.140	346.80	16.320	20.153	1228.00	11.300	9.000	209.400
3/18/81	12:56:52	-15 14.221'	75 32.837'	3	12.443	17.961	6.140	346.80	16.320	20.153	1228.00	11.300	8.200	132.300
3/18/81	13:11:52	-15 14.221'	75 32.837'	3	12.392	18.116	15.307	391.17	15.566	56.452	1228.00	11.300	8.200	132.300
3/18/81	13:26:53	-15 14.221'	75 32.837'	3	13.247	18.680	10.772	381.77	14.978	59.602	1228.00	11.400	4.200	172.900

C STATION 3 ZODIACS AND BIMS OVER THE SIDE TODAY

3/18/81	13:41:53	-15 14.221'	75 32.837'	3	13.965	19.421	1.434	373.65	14.542	111.730	1228.00	6.200	4.500	287.500
3/18/81	13:56:53	-15 14.221'	75 32.837'	3	13.561	18.568	1.455	405.55	14.412	143.940	1228.00	3.200	2.300	293.100
3/18/81	14:11:54	-15 5.417'	75 25.338'	3	6.189	18.349	10.325	371.30	14.346	144.170	1332.00	3.200	6.800	160.800
3/18/81	14:26:54	-15 5.417'	75 25.338'	3	13.423	19.703	9.623	364.31	14.336	145.660	1332.00	3.200	6.300	152.100
3/18/81	14:41:57	-15 6.463'	75 24.629'	2	13.099	17.853	3.325	477.07	14.551	58.402	1422.00	3.200	5.600	206.200
3/18/81	14:57:0	-15 6.463'	75 24.629'	2	12.444	17.598	4.377	137.08	14.435	90.837	1422.00	3.200	7.000	246.000
3/18/81	15:12:6	-15 6.463'	75 24.629'	2	12.888	18.265	5.119	218.69	14.313	325.730	1422.00	3.200	7.800	170.000
3/18/81	15:27:6	-15 6.463'	75 24.629'	2	14.011	19.759	18.954	319.72	14.299	239.920	1422.00	2.400	6.000	184.800
3/18/81	15:42:6	-15 6.463'	75 24.629'	2	13.980	19.663	8.354	326.54	14.301	219.520	1422.00	2.400	17.100	181.900
3/18/81	15:57:6	-15 6.463'	75 24.629'	2	13.157	18.757	1.520	158.68	14.400	99.057	1422.00	2.400	5.100	216.100
3/18/81	16:12:6	-15 6.463'	75 24.629'	2	13.052	18.274	5.316	131.14	14.591	83.277	1422.00	2.000	2.900	239.600
3/18/81	16:27:6	-15 6.463'	75 24.629'	2	13.169	18.161	2.728	148.73	14.646	92.119	1604.00	2.000	17.400	187.300
3/18/81	16:42:6	-15 4.803'	75 26.569'	3	13.391	19.321	17.624	300.63	14.445	247.780	1604.00	2.000	5.400	213.000
3/18/81	16:57:6	-15 4.803'	75 26.569'	3	13.333	18.337	5.346	135.82	14.667	76.447	1604.00	2.000	5.600	223.000
3/18/81	17:12:6	-15 4.803'	75 26.569'	3	13.314	18.162	5.422	144.60	14.871	79.594	1604.00	2.000	5.600	223.000
3/18/81	17:27:6	-15 4.680'	75 26.585'	3	13.302	18.140	5.212	140.91	14.865	77.001	1658.00	2.000	6.500	221.100

DATE	TIME	DEC, MIN-LAT	DEC, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPRWSR	APPRWSR	SEATEMP	GYROH-D	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/18/81	17:42	8	-15	4.680'	75 26.985'	3	13.112	18.261	4.145	129.53	14.833	79.976	1658.00	200
3/18/81	17:57	8	-15	4.680'	75 26.985'	3	13.341	18.492	5.779	137.60	14.883	72.316	1658.00	200
3/18/81	18:12	8	-15	4.680'	75 26.985'	3	11.490	18.384	7.190	134.02	14.903	75.120	1658.00	200
3/18/81	18:27	8	-15	4.680'	75 26.985'	3	13.737	18.702	5.655	140.76	14.821	78.603	1658.00	200
3/18/81	18:42	8	-15	4.680'	75 26.985'	3	13.333	18.793	5.727	136.87	14.850	70.902	1658.00	200
3/18/81	18:57	8	-15	4.680'	75 26.985'	3	13.363	18.860	7.119	132.15	14.739	81.018	1658.00	200
3/18/81	19:12	8	-15	2.994'	75 27.360'	3	13.111	19.229	12.702	298.69	14.659	248.780	1816.00	200
3/18/81	19:27	8	-15	2.994'	75 27.360'	3	12.915	19.219	8.062	292.95	14.694	264.540	1816.00	200
3/18/81	19:42	8	-15	2.994'	75 27.360'	3	12.668	19.224	8.753	279.81	14.706	267.200	1816.00	200
3/18/81	19:57	8	-15	2.994'	75 27.360'	3	12.587	19.220	9.263	279.57	14.726	265.950	1816.00	200
3/18/81	20:12	8	-15	2.994'	75 27.360'	3	13.329	19.580	7.464	293.51	14.757	263.320	1816.00	200
3/18/81	20:27	8	-15	2.994'	75 27.360'	3	13.943	19.946	30.254	687.54	14.741	204.490	1816.00	200
3/18/81	20:42	8	-15	2.994'	75 27.360'	3	14.128	20.468	30.774	703.02	15.005	183.880	1816.00	200
3/18/81	20:57	8	-15	2.994'	75 27.360'	3	13.580	19.041	8.411	132.26	15.111	78.976	1816.00	200
3/18/81	21:12	8	-15	2.994'	75 27.360'	3	13.861	19.035	5.699	126.44	15.078	76.647	1816.00	200
3/18/81	21:27	8	-15	2.994'	75 27.360'	3	13.779	18.883	4.262	117.78	15.081	75.566	1816.00	200
3/18/81	21:42	8	-15	2.761'	75 30.154'	5	12.911	19.394	31.980	342.83	15.088	135.250	2118.00	200
3/18/81	21:57	8	-15	2.761'	75 30.154'	5	13.687	20.717	33.804	350.13	15.044	172.550	2118.00	200
3/18/81	22:12	8	-15	2.761'	75 30.154'	5	12.971	19.226	12.170	279.46	15.049	262.940	2118.00	200
3/18/81	22:27	8	-15	2.761'	75 30.154'	5	12.888	18.860	9.796	251.35	15.192	268.540	2118.00	200
3/18/81	22:42	8	-15	2.761'	75 30.154'	5	12.865	18.680	10.621	245.48	15.380	268.160	2118.00	200
3/18/81	22:57	8	-15	4.111'	75 29.003'	3	12.741	18.680	11.985	241.17	15.451	269.270	2226.00	200
3/18/81	23:12	8	-15	4.111'	75 29.003'	3	13.331	18.679	10.077	244.19	15.528	269.450	2226.00	200
3/18/81	23:27	8	-15	4.750'	75 31.757'	3	13.314	18.542	7.007	247.99	15.558	270.170	2308.00	300
3/18/81	23:42	8	-15	4.750'	75 31.757'	3	13.331	18.150	5.675	266.55	15.522	268.950	2308.00	300
3/18/81	23:57	8	-15	4.750'	75 31.757'	3	13.333	18.140	5.599	261.87	15.687	267.840	2308.00	200
3/18/81	0:12	8	-15	4.750'	75 31.757'	3	13.281	17.957	12.976	296.69	15.881	245.420	2308.00	100
3/19/81	0:27	8	-15	4.750'	75 31.757'	3	13.995	18.269	20.581	325.97	16.120	200.310	2308.00	200

C STEERING FOR ATMOSPHERIC SAMPLES TIME STARTED 22:30Z

3/19/81	0:42	8	-15	3.085'	75 34.656'	3	14.338	18.140	17.179	326.56	16.402	199.090	10.00	4.200
3/19/81	0:57	9	-15	3.085'	75 34.656'	3	14.440	18.479	17.001	328.25	16.234	199.720	10.00	4.300
3/19/81	1:12	9	-15	3.085'	75 34.656'	3	15.089	18.835	19.923	328.44	16.478	199.190	10.00	4.300
3/19/81	1:27	9	-15	6.384'	75 36.346'	3	15.332	19.152	19.241	327.77	16.693	199.530	108.00	4.300
3/19/81	1:42	9	-15	6.384'	75 36.346'	3	15.906	19.400	20.492	327.44	17.010	198.560	108.00	4.300
3/19/81	1:57	9	-15	6.384'	75 36.346'	3	15.975	19.580	20.121	326.34	17.260	198.520	108.00	4.300
3/19/81	2:12	9	-15	6.384'	75 36.346'	3	15.597	19.760	19.594	376.15	17.473	122.770	108.00	4.300
3/19/81	2:27	9	-15	6.384'	75 36.346'	3	15.333	19.760	19.770	374.83	17.561	118.610	108.00	4.300
3/19/81	2:42	9	-15	6.384'	75 36.346'	3	15.555	19.581	18.449	379.01	17.868	119.050	108.00	2.000
3/19/81	2:57	9	-15	6.384'	75 36.346'	3	15.337	19.464	19.326	379.56	17.900	120.500	108.00	2.000
3/19/81	3:12	9	-15	10.032'	75 37.415'	3	15.333	19.400	19.177	383.06	17.759	119.940	250.00	2.100
3/19/81	3:27	9	-15	10.032'	75 37.415'	3	15.302	19.400	19.646	384.58	17.660	118.680	250.00	2.100
3/19/81	3:42	9	-15	10.032'	75 37.415'	3	15.194	19.400	18.974	381.56	17.659	119.640	250.00	2.100
3/19/81	3:57	9	-15	10.447'	75 36.868'	3	15.322	19.400	18.731	382.14	17.650	118.790	330.00	2.100
3/19/81	4:12	9	-15	10.447'	75 36.868'	3	15.254	19.400	17.813	382.87	17.676	120.300	330.00	2.000
3/19/81	4:27	9	-15	11.145'	75 35.476'	3	15.111	19.400	16.721	382.84	17.776	120.120	330.00	2.100
3/19/81	4:42	9	-15	11.145'	75 35.476'	3	15.255	19.400	15.584	387.34	17.804	119.730	424.00	2.000
3/19/81	4:57	9	-15	11.145'	75 35.476'	3	15.476	19.400	15.584	387.34	17.775	119.170	424.00	2.100
3/19/81	5:12	9	-15	11.145'	75 35.476'	3	15.556	19.269	14.358	384.59	17.722	119.120	424.00	2.000
3/19/81	5:27	9	-15	11.145'	75 35.476'	3	16.220	19.580	17.358	343.07	17.841	169.930	424.00	2.000
3/19/81	5:42	9	-15	11.988'	75 33.962'	2	16.168	19.580	18.161	339.15	18.154	169.170	518.00	3.800
3/19/81	5:57	9	-15	11.988'	75 33.962'	2	16.580	19.817	17.734	342.18	18.460	161.980	518.00	3.800
3/19/81	6:12	9	-15	11.988'	75 33.962'	2	16.666	19.997	17.501	345.85	18.976	159.810	518.00	3.700
3/19/81	6:27	9	-15	11.988'	75 33.962'	2	16.865	20.120	17.821	346.47	19.526	157.430	518.00	3.700
3/19/81	6:42	9	-15	15.062'	75 33.627'	3	16.738	20.136	17.760	341.47	19.779	157.010	610.00	4.000
3/19/81	6:57	9	-15	15.062'	75 33.627'	3	17.106	20.298	15.226	336.26	20.125	158.130	610.00	4.000
3/19/81	7:12	9	-15	15.062'	75 33.627'	3	16.837	20.300	16.288	370.61	20.311	157.240	610.00	4.000
3/19/81	7:27	9	-15	15.062'	75 33.627'	3	16.826	20.461	18.003	345.07	20.483	147.520	610.00	4.100
3/19/81	7:42	9	-15	15.062'	75 33.627'	3	16.879	20.480	18.288	344.34	20.586	147.370	610.00	4.000

3/19/81	7:57	9	-15 15 062'	75 33 627'	3	16 890	20 480	18 551	338 59	20 753	147 840	610 00	4 000	15 300	122 890
3/19/81	8:12	9	-15 15 062'	75 33 627'	3	16 444	20 301	20 264	350 31	20 817	136 640	610 00	4 100	16 700	123 400
3/19/81	8:27	9	-15 15 062'	75 33 627'	3	16 304	20 301	18 767	354 85	20 867	137 690	610 00	4 000	14 900	131 100
3/19/81	8:42	9	-15 15 062'	75 33 627'	3	16 444	20 300	18 645	353 55	21 002	137 920	610 00	4 200	13 300	129 300
3/19/81	8:57	9	-15 15 062'	75 33 627'	3	16 224	20 127	20 151	356 87	21 039	135 900	610 00	4 200	15 600	131 800
3/19/81	9:12	9	-15 23 449'	75 30 019'	3	16 240	20 236	21 819	353 78	21 065	136 490	844 00	4 200	16 900	129 400
3/19/81	9:27	9	-15 23 449'	75 30 019'	3	16 444	20 120	20 592	352 50	21 067	136 460	844 00	4 200	16 300	126 900
3/19/81	9:42	9	-15 23 449'	75 30 019'	3	16 152	20 121	22 116	354 71	20 964	136 900	844 00	4 200	18 500	129 700
3/19/81	9:57	9	-15 23 449'	75 30 019'	3	16 294	20 185	24 472	355 64	20 939	137 290	844 00	4 200	20 300	133 000
3/19/81	10:12	9	-15 26 909'	75 27 118'	3	16 684	20 480	25 032	359 16	21 077	137 340	954 00	4 200	20 400	131 000
3/19/81	10:27	9	-15 26 909'	75 27 118'	3	16 527	20 480	25 594	351 13	21 230	136 980	954 00	4 200	21 900	125 900
3/19/81	10:42	9	-15 26 909'	75 27 118'	3	16 636	20 480	25 412	348 75	21 368	137 240	954 00	4 200	20 900	123 700
3/19/81	10:57	9	-15 28 211'	75 25 519'	3	16 366	20 480	25 441	355 00	21 411	136 570	1032 00	4 200	21 100	129 100
3/19/81	11:12	9	-15 28 211'	75 25 519'	3	16 727	20 522	25 386	349 83	21 383	137 300	1032 00	4 200	20 900	125 300
3/19/81	11:27	9	-15 28 211'	75 25 519'	3	16 592	20 660	25 323	347 17	21 459	137 300	1032 00	4 200	20 900	122 600
3/19/81	11:42	9	-15 28 211'	75 25 519'	3	16 904	20 660	3 474	128 29	21 329	340 840	1032 00	4 200	6 700	139 500
3/19/81	11:57:11		-15 28 211'	75 25 519'	3	16 755	20 367	3 365	135 43	20 826	340 690	1032 00	4 200	7 100	139 300
3/19/81	12:12:11		-15 28 211'	75 25 519'	3	16 031	20 480	2 799	126 01	20 643	339 000	1032 00	4 200	5 900	142 500
3/19/81	12:27:11		-15 28 211'	75 25 519'	3	16 445	20 659	4 940	123 46	20 437	341 670	1032 00	11 500	14 400	147 700
3/19/81	12:42:11		-15 28 211'	75 25 519'	3	16 879	20 837	5 264	130 53	20 307	339 530	1032 00	11 400	15 400	143 700
3/19/81	12:57:11		-15 28 211'	75 25 519'	3	16 729	20 840	5 209	128 12	19 741	338 800	1032 00	11 400	15 400	142 900
3/19/81	13:12:12		-15 28 211'	75 25 519'	3	15 989	20 661	3 537	125 47	18 582	339 090	1032 00	11 500	14 100	146 200
3/19/81	13:27:14		-15 28 211'	75 25 519'	3	14 531	19 828	4 043	130 31	17 482	185 770	1032 00	11 500	14 800	353 300
3/19/81	13:42:14		-15 8 924'	75 31 461'	9	13 415	19 470	8 613	213 51	16 555	69 261	1328 00	11 500	18 200	264 700
3/19/81	13:57:14		-15 8 924'	75 31 461'	9	12 677	18 685	12 404	399 55	16 013	77 363	1328 00	11 500	8 900	170 600
3/19/81	14:12:14		-15 8 924'	75 31 461'	9	9 367	17 880	3 906	187 31	15 515	84 063	1328 00	6 400	7 900	280 500
3/19/81	14:27:14		-15 8 924'	75 31 461'	9	12 685	18 567	10 420	300 48	15 244	246 210	1328 00	6 500	9 700	149 400
3/19/81	14:42:14		-15 8 924'	75 31 461'	9	5 317	18 689	7 259	301 36	15 304	256 410	1328 00	6 500	7 600	138 200
3/19/81	14:57:14		-15 6 015'	75 25 089'	3	12 448	18 860	8 321	273 25	15 346	263 960	1428 00	6 500	10 400	137 000

C BACK ON STATION 3 ZODIAKS AND BIMS OVER THE SIDE

3/19/81	15:12:16	-15	6.015'	75 25.089'	3	12.444	19.015	8.006	281.07	15.292	258.620	1428.00	6.500	9.800	131.200
3/19/81	15:27:16	-15	6.015'	75 25.087'	3	12.591	19.284	8.728	297.72	15.242	255.650	1428.00	6.500	8.000	147.603
3/19/81	15:42:17	-15	5.125'	75 25.828'	3	12.988	19.220	7.371	287.25	15.161	257.230	1516.03	6.500	8.500	132.800
3/19/81	15:57:17	-15	5.125'	75 25.828'	3	12.584	19.690	17.476	215.08	15.186	303.830	1516.00	6.500	25.400	145.300
3/19/81	16:12:18	-15	5.125'	75 25.828'	3	12.899	20.095	8.647	308.90	15.281	260.410	1516.00	6.500	6.600	164.400
3/19/81	16:27:19	-15	4.160'	75 26.410'	3	12.886	19.931	10.141	313.56	15.301	255.930	1610.00	6.500	5.900	162.200
3/19/81	16:42:19	-15	4.160'	75 26.410'	3	12.887	19.693	9.158	312.04	15.390	259.800	1610.00	6.500	7.400	165.893
3/19/81	16:57:19	-15	4.160'	75 26.410'	3	12.890	19.644	10.267	313.85	15.518	242.320	1610.00	6.400	8.100	162.000
3/19/81	17:12:20	-15	4.160'	75 26.410'	3	13.111	19.583	7.577	304.93	15.527	255.090	1610.00	6.500	7.000	143.400
3/19/81	17:27:21	-15	3.839'	75 29.092'	3	12.887	19.559	7.759	297.85	15.513	258.980	1704.00	6.500	7.300	146.500
3/19/81	17:42:21	-15	3.839'	75 29.092'	3	13.099	19.418	7.774	300.22	15.493	255.210	1704.00	6.500	6.900	146.300
3/19/81	17:57:22	-15	3.839'	75 29.092'	3	13.080	19.530	8.718	306.02	15.516	253.440	1704.00	6.500	7.200	152.900
3/19/81	18:12:22	-15	2.931'	75 29.923'	3	12.675	19.516	8.748	286.48	15.611	260.160	1752.00	6.500	9.000	143.100
3/19/81	18:27:25	-15	2.931'	75 29.923'	3	12.822	19.578	8.661	291.69	15.472	252.780	1752.00	6.500	8.400	142.500
3/19/81	18:42:28	-15	2.931'	75 29.923'	3	13.028	19.532	9.075	273.23	15.468	259.410	1752.00	6.500	10.300	136.400
3/19/81	18:57:31	-15	2.931'	75 29.923'	3	12.947	19.406	8.051	299.55	15.468	250.540	1752.00	6.400	7.700	143.500
3/19/81	19:12:34	-15	2.931'	75 29.923'	3	13.186	20.611	31.127	378.43	15.473	129.990	1752.00	6.500	24.900	152.300
3/19/81	19:27:37	-15	2.931'	75 29.923'	3	14.037	19.220	14.409	132.07	15.407	37.651	1752.00	6.500	19.500	104.600
3/19/81	19:42:40	-15	2.931'	75 29.923'	3	13.112	19.229	15.162	286.02	15.330	248.910	1752.00	6.400	13.700	160.400
3/19/81	19:57:43	-15	2.931'	75 29.923'	3	13.247	19.042	17.905	241.03	15.350	296.820	1752.00	6.500	12.200	150.300

C ATMOSPHERIC, ZODIAK, BIMS, SAMPLING DONE CHLOROPHYL SAMPLING UNDER WAY 20:15Z

3/19/81	20:14:55	-15	2 931'	75 29 923'	3 13 583	19 087	20 057	304 53	15 587	240 750	1752 00	6 500	17 200	167 103
3/19/81	20:29:55	-15	2 931'	75 29 923'	3 13 999	19 399	24 817	326 90	15 735	221 850	1752 00	6 500	20 500	181 103
3/19/81	20:44:56	-15	2 931'	75 29 923'	3 15 108	19 873	23 573	327 85	15 898	219 730	1752 00	8 100	17 900	171 103
3/19/81	20:59:57	-15	1 200'	75 34 310'	3 15 998	20 300	25 510	326 28	16 366	220 890	2028 00	8 100	19 700	173 400
3/19/81	21:14:57	-15	1 200'	75 34 310'	3 16 412	20 480	22 790	324 65	16 765	221 750	2028 00	8 200	16 800	170 300

757

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DENPOIN	AIRTEMP	APPRWSR	APPRDR	SEATEMP	CYRHOED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/19/81	21:29:57	-15 1.200'	75 34.310'	3	16.655	20.837	22.971	326.59	17.207	222.340	2028.00	8.100	17.000	173.100
3/19/81	21:44:57	-15 1.200'	75 34.310'	3	17.331	21.020	23.167	327.11	17.854	221.600	2028.00	8.200	16.600	170.800
3/19/81	21:59:57	-15 1.200'	75 34.310'	3	17.498	21.355	13.512	499.22	18.423	132.380	2028.00	8.200	28.900	298.200
3/19/81	22:14:57	-15 1.200'	75 34.310'	3	16.463	20.663	1.988	158.10	18.584	54.788	2028.00	8.200	10.400	231.200
3/19/81	22:29:57	-15 1.200'	75 34.310'	3	16.011	20.300	2.108	174.14	18.290	57.477	2028.00	8.100	10.300	238.300
3/19/81	22:44:57	-15 8.895'	75 42.296'	3	15.419	19.827	2.403	186.54	17.686	58.333	2216.00	7.900	9.300	246.900
3/19/81	22:59:57	-15 8.895'	75 42.296'	3	14.900	19.281	2.139	135.92	17.242	63.184	2216.00	7.900	9.100	234.200
3/19/81	23:14:57	-15 8.895'	75 42.296'	3	14.226	18.690	2.721	323.82	16.788	65.650	2216.00	7.900	11.800	245.800
3/19/81	23:29:57	-15 8.895'	75 42.296'	3	13.154	18.320	3.527	160.39	16.370	65.756	2216.00	7.900	13.600	235.500
3/19/81	23:44:58	-15 4.064'	75 35.013'	3	12.889	17.787	8.156	179.30	16.157	62.931	2322.00	7.900	12.500	227.400
3/19/81	23:59:58	-15 4.064'	75 35.013'	3	13.280	17.932	5.750	134.60	15.476	65.542	2322.00	7.900	21.400	177.000
3/19/81	0:14:58	-15 4.064'	75 35.013'	3	13.771	18.206	27.059	326.95	15.175	222.900	2322.00	7.900	12.500	227.400
3/19/81	0:29:58	-15 4.064'	75 35.013'	3	13.988	18.205	23.074	327.16	15.650	220.140	2322.00	7.900	16.600	172.000
3/20/81	0:44:58	-15 4.064'	75 35.013'	3	14.666	18.860	26.157	324.85	16.121	217.810	2322.00	7.900	19.800	173.100
3/20/81	1:14:58	-15 4.064'	75 35.013'	3	15.999	19.693	25.611	323.98	17.286	224.390	2322.00	7.900	19.000	173.200
3/20/81	1:29:58	-15 4.064'	75 35.013'	3	16.210	19.760	24.374	322.78	17.672	224.810	2322.00	7.900	17.700	166.700
3/20/81	1:44:58	-15 7.918'	75 37.237'	3	16.604	20.120	23.191	319.32	18.191	223.620	110.00	7.900	16.700	165.800
3/20/81	1:59:58	-15 7.918'	75 37.237'	3	17.331	20.300	22.634	324.51	18.726	224.010	110.00	7.900	16.700	165.800
3/20/81	2:14:58	-15 11.295'	75 41.142'	3	16.455	19.940	2.037	225.79	18.915	55.596	146.00	7.900	9.900	231.500
3/20/81	2:29:58	-15 11.295'	75 41.142'	3	15.999	19.646	2.355	145.22	18.647	55.433	146.00	7.900	9.500	222.000
3/20/81	2:44:58	-15 11.295'	75 41.142'	3	15.566	19.403	2.954	131.22	18.072	55.436	146.00	7.800	10.500	222.100
3/20/81	2:59:58	-15 11.295'	75 41.142'	3	15.999	19.245	7.328	139.43	17.676	58.045	146.00	7.900	13.300	215.600
3/20/81	3:14:58	-15 9.411'	75 38.670'	3	15.116	19.043	2.920	146.52	17.581	60.160	242.00	7.900	10.400	230.000
3/20/81	3:29:58	-15 9.411'	75 38.670'	3	14.387	18.683	1.927	133.76	17.176	64.556	242.00	7.900	9.700	235.800
3/20/81	3:44:58	-15 9.411'	75 38.670'	3	13.777	18.207	2.622	200.39	16.664	69.977	242.00	7.900	9.300	267.800
3/20/81	3:59:58	-15 6.584'	75 35.300'	3	12.871	17.424	2.274	208.45	16.228	69.362	328.00	7.900	10.600	247.400
3/20/81	4:14:58	-15 6.584'	75 35.300'	3	12.888	17.240	3.080	162.47	15.828	69.727	328.00	7.900	10.200	234.900
3/20/81	4:29:58	-15 6.584'	75 35.300'	3	13.585	17.426	23.126	322.68	15.644	229.270	328.00	7.900	17.700	174.900
3/20/81	4:44:58	-15 6.584'	75 35.300'	3	14.409	17.951	23.947	327.05	15.888	216.820	328.00	7.900	17.900	128.900
3/20/81	4:59:58	-15 4.938'	75 30.914'	4	14.955	18.497	24.688	607.57	16.363	217.000	428.00	7.900	32.700	46.400
3/20/81	5:14:58	-15 4.938'	75 30.914'	4	15.463	18.859	25.050	543.86	16.903	208.510	428.00	7.900	32.900	19.400
3/20/81	5:29:58	-15 4.938'	75 30.914'	4	15.999	19.195	22.752	516.45	17.419	209.570	428.00	7.900	25.200	324.300
3/20/81	5:44:58	-15 10.032'	75 35.639'	3	16.806	19.513	21.112	565.73	18.118	214.620	518.00	7.900	27.300	66.500
3/20/81	5:59:58	-15 10.032'	75 35.639'	3	17.321	19.760	18.294	321.86	18.865	223.470	518.00	7.800	13.200	162.900
3/20/81	6:14:59	-15 10.032'	75 35.639'	3	16.007	19.425	1.639	240.69	19.279	59.157	518.00	7.900	8.200	251.100
3/20/81	6:29:59	-15 10.032'	75 35.639'	3	15.555	19.205	3.336	173.29	18.994	62.044	518.00	7.900	10.700	233.200
3/20/81	6:45:00	-15 10.032'	75 35.639'	3	14.701	18.731	2.316	132.84	18.410	63.166	518.00	7.900	9.600	240.000
3/20/81	7:00:01	-15 10.032'	75 35.639'	3	14.445	18.329	2.412	224.49	17.830	63.391	518.00	8.000	8.300	259.400
3/20/81	7:15:01	-15 10.032'	75 35.639'	3	14.233	18.140	2.598	120.33	17.260	62.820	518.00	8.000	10.100	230.800
3/20/81	7:30:01	-15 12.141'	75 33.077'	5	14.006	17.960	3.723	147.00	16.765	63.439	708.00	8.000	11.600	235.500
3/20/81	7:45:01	-15 12.141'	75 33.077'	5	13.193	17.454	1.755	343.84	16.219	63.543	708.00	8.000	6.600	256.300
3/20/81	7:59:01	-15 12.141'	75 33.077'	5	12.414	17.284	2.510	262.79	15.688	63.035	708.00	8.000	7.300	262.800
3/20/81	8:15:01	-15 12.141'	75 33.077'	5	13.585	17.524	22.224	325.08	15.504	220.950	708.00	8.000	16.700	169.600
3/20/81	8:30:01	-15 6.782'	75 27.639'	3	14.636	18.311	25.714	322.53	15.897	221.330	754.00	8.000	19.900	171.300
3/20/81	8:45:01	-15 6.782'	75 27.639'	3	15.106	18.500	24.523	319.38	16.374	221.020	754.00	8.000	19.200	165.800
3/20/81	9:00:01	-15 6.782'	75 27.639'	3	15.912	18.973	24.309	321.43	17.162	220.850	754.00	8.000	19.030	166.600
3/20/81	9:15:01	-15 6.782'	75 27.639'	3	16.275	19.178	24.460	312.28	17.928	221.550	754.00	8.000	20.000	156.700
3/20/81	9:30:01	-15 6.782'	75 27.639'	3	16.936	19.220	19.659	314.58	18.611	221.650	754.00	8.000	17.800	156.400
3/20/81	9:45:01	-15 6.782'	75 27.639'	3	16.748	19.049	5.092	151.19	19.442	31.478	754.00	8.000	15.800	150.700
3/20/81	10:00:01	-15 15.593'	75 36.733'	4	16.591	19.040	5.469	137.76	19.153	30.442	940.00	8.000	12.100	196.400
3/20/81	10:15:01	-15 15.593'	75 36.733'	4	15.177	18.680	1.775	162.61	18.450	59.375	940.00	8.000	11.800	195.800
3/20/81	10:30:01	-15 15.593'	75 36.733'	4	15.312	18.500	3.413	135.40	18.111	33.352	940.00	8.000	10.000	242.000
3/20/81	10:45:01	-15 15.593'	75 36.733'	4	14.919	17.970	4.771	126.59	17.264	30.258	940.00	8.000	11.300	198.900
3/20/81	11:00:01	-15 10.155'	75 33.712'	3	13.236	17.139	5.243	295.58	16.317	30.160	1048.00	8.200	12.200	190.500
3/20/81	11:15:01	-15 10.155'	75 33.712'	3	12.414	16.922	1.011	114.34	15.892	29.726	1048.00	8.200	11.100	240.000
3/20/81	11:30:01	-15 10.155'	75 33.712'	3	12.577	17.059	1.877	128.58	15.901	30.695	1048.00	8.200	9.000	204.300
3/20/81	11:45:01	-15 10.155'	75 33.712'	3	13.107	17.204	9.187	307.40	15.135	29.720	1048.00	8.200	9.500	200.100
3/20/81	12:00:01	-15 10.155'	75 33.712'	3	13.107	17.204	9.187	307.40	15.135	29.720	1048.00	8.200	8.700	155.100
3/20/81	12:15:01	-15 10.155'	75 33.712'	3	13.333	17.420	7.244	295.61	15.319	259.340	1048.00	8.300	7.900	128.300
3/20/81	12:30:01	-15 10.155'	75 33.712'	3	14.299	17.960	12.593	302.45	15.610	245.360	1048.00	8.200	11.000	146.800

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPRWSR	SEATEMP	GYROED	ZULUFIX	MANUSPD	TRWDSPD	TRWDDIR
3/20/81	12:45	1 -15 10.155'	75 33.712'	3	14.151	18.124	13.073	307.99	15.879	248.140	1048.00	8.100	10.100 157.200
3/20/81	13:00	1 -15 4.409'	75 36.662'	4	13.778	18.311	13.142	310.42	16.185	246.430	1236.00	8.100	9.900 158.600
3/20/81	13:15	1 -15 4.409'	75 36.662'	4	14.020	18.860	16.240	380.20	16.355	107.970	1236.00	8.100	18.800 108.700
3/20/81	13:30	1 -15 4.409'	75 36.662'	4	14.593	19.152	27.805	369.08	16.313	128.980	1236.00	8.000	19.700 141.100
3/20/81	13:45	1 -15 6.699'	75 37.774'	2	14.888	19.400	27.194	376.80	16.401	119.530	1322.00	8.000	19.600 141.700
3/20/81	14:00	1 -15 6.699'	75 37.774'	2	15.075	19.391	27.353	366.84	16.832	134.050	1322.00	8.100	19.100 143.100
3/20/81	14:15	1 -15 6.699'	75 37.774'	2	14.850	19.433	28.489	365.01	17.150	134.320	1322.00	8.000	20.100 140.600
3/20/81	14:30	2 -15 6.699'	75 37.774'	2	14.222	18.641	5.639	129.04	17.044	45.176	1322.00	8.000	11.900 205.800
3/20/81	14:45	2 -15 6.699'	75 37.774'	2	12.995	18.149	7.201	244.54	16.205	45.009	1322.00	8.000	14.100 245.200
3/20/81	15:00	2 -15 6.699'	75 37.774'	2	12.874	17.781	5.614	490.02	15.566	46.198	1322.00	8.000	12.100 204.900
3/20/81	15:15	2 -15 6.699'	75 37.774'	2	13.772	18.745	3.881	424.94	15.252	85.942	1322.00	8.100	6.000 233.400
3/20/81	15:30	2 -15 5.021'	75 27.444'	3	13.360	18.656	7.019	213.59	15.176	95.050	1504.00	8.000	12.600 307.100

C CHLOROPHYL SAMPLING COMPLETED AT 09:15 LOCAL SEDIMENT TRAPS PICKED UP 10:30 LDCZ

C ZODIAK AND BIMS OVER THE SIDE

3/20/81	15:45	2 -15 5.021'	75 27.444'	3	13.385	18.133	8.334	130.48	15.142	74.911	1504.00	8.000	14.800 230.200
3/20/81	16:00	3 -15 5.021'	75 27.444'	3	13.122	17.960	7.877	127.45	15.210	76.064	1504.00	500	8.100 205.800
3/20/81	16:15	3 -15 5.021'	75 27.444'	3	12.662	18.670	24.990	392.48	14.990	125.580	1504.00	600	24.200 158.900
3/20/81	16:30	3 -15 5.021'	75 27.444'	3	13.912	18.377	6.039	128.25	14.889	77.346	1504.00	500	6.000 208.500
3/20/81	16:45	3 -15 4.670'	75 26.544'	3	13.998	18.664	6.497	129.23	14.957	80.686	1614.00	600	6.300 215.900
3/20/81	17:00	3 -15 4.670'	75 26.544'	3	13.989	19.565	30.354	326.96	14.843	216.330	1614.00	500	29.600 182.200
3/20/81	17:15	3 -15 4.670'	75 26.544'	3	14.416	19.400	23.818	329.45	15.203	219.600	1614.00	500	23.100 187.600
3/20/81	17:30	3 -15 5.025'	75 26.757'	3	14.615	19.180	5.462	266.45	15.769	246.270	1702.00	500	5.200 145.200
3/20/81	17:45	3 -15 5.025'	75 26.757'	3	14.231	19.400	6.056	302.88	16.348	239.540	1702.00	500	5.900 175.900
3/20/81	18:00	3 -15 5.025'	75 26.757'	3	14.434	19.406	5.566	298.93	16.527	250.510	1702.00	600	5.000 189.700
3/20/81	18:15	3 -15 5.025'	75 26.757'	3	14.499	19.400	6.852	270.51	16.718	249.570	1702.00	600	6.500 195.500
3/20/81	18:30	3 -15 5.025'	75 26.757'	3	14.223	19.195	5.857	288.61	16.809	246.460	1702.00	600	5.800 170.000
3/20/81	18:45	3 -15 5.025'	75 26.757'	3	14.662	19.400	5.762	291.77	16.893	249.170	1702.00	600	5.400 178.400
3/20/81	19:00	3 -15 5.025'	75 26.757'	3	14.444	19.423	5.929	307.76	17.006	245.380	1702.00	500	5.700 187.600
3/20/81	19:15	3 -15 7.039'	75 31.376'	3	14.443	19.330	5.406	290.69	16.925	239.300	1850.00	500	5.200 161.800
3/20/81	19:30	3 -15 7.039'	75 31.376'	3	14.447	19.226	5.746	301.87	16.887	243.360	1850.00	500	5.600 178.900
3/20/81	19:45	3 -15 7.039'	75 31.376'	3	14.414	19.226	7.387	295.18	16.892	244.980	1850.00	500	6.900 179.800
3/20/81	20:00	3 -15 6.598'	75 31.889'	3	14.414	19.375	6.409	313.80	16.915	242.610	1850.00	500	6.800 177.700
3/20/81	20:15	3 -15 6.598'	75 31.889'	3	14.252	19.049	7.113	300.26	16.713	243.970	1942.00	600	7.200 171.400
3/20/81	20:30	3 -15 6.598'	75 31.889'	3	14.232	19.040	7.668	281.38	16.583	252.060	1942.00	300	7.200 182.700
3/20/81	20:45	3 -15 6.598'	75 31.889'	3	14.220	18.860	7.314	299.55	16.404	245.650	1942.00	200	7.300 158.400
3/20/81	21:00	3 -15 6.598'	75 31.889'	3	13.777	18.859	7.497	299.06	16.324	244.790	1942.00	200	7.000 181.700
3/20/81	21:15	3 -15 6.598'	75 31.889'	3	13.959	18.876	7.234	274.84	16.372	244.500	1942.00	200	7.300 158.400
3/20/81	21:30	3 -15 6.598'	75 31.889'	3	15.105	18.861	5.963	126.47	16.242	46.861	1942.00	200	6.600 171.200
3/20/81	21:45	3 -15 6.598'	75 31.889'	3	14.888	18.705	4.408	126.96	16.196	69.209	1942.00	200	4.800 197.900
3/20/81	22:00	3 -15 4.878'	75 33.016'	4	14.851	18.879	6.146	125.46	15.935	59.803	2124.00	200	5.800 185.800
3/20/81	22:15	5 -15 4.878'	75 33.016'	4	14.455	18.574	5.478	119.04	15.919	55.874	2124.00	200	6.100 181.900
3/20/81	22:30	5 -15 4.878'	75 33.016'	4	14.232	18.326	4.541	131.20	15.864	71.179	2124.00	200	4.500 202.300
3/20/81	22:45	5 -15 4.878'	75 33.016'	4	14.219	18.147	6.055	128.68	15.871	67.021	2124.00	200	6.700 197.400
3/20/81	23:00	5 -15 3.504'	75 33.413'	3	14.004	18.140	5.834	130.42	15.824	63.630	2234.00	200	5.800 197.400
3/20/81	23:15	7 -15 3.504'	75 33.413'	3	13.789	18.026	5.150	123.60	15.888	61.219	2234.00	200	5.500 186.600
3/20/81	23:30	8 -15 3.504'	75 33.413'	3	13.129	17.960	15.814	299.58	15.788	102.740	2234.00	200	14.900 347.200
3/20/81	23:45	8 -15 3.504'	75 33.413'	3	14.006	18.139	28.318	352.46	15.729	162.130	2234.00	2.100	26.400 154.800
3/20/81	00:00	8 -15 3.504'	75 33.413'	3	14.419	18.497	26.620	357.05	15.735	158.840	2234.00	2.100	24.800 157.800

C STEAMING FOR ATMOSPHERIC SAMPLING

3/21/81	0:15:10	-15 3.504'	75 33.413'	3	14.226	18.332	22.408	350.95	15.696	160.470	2234.00	2.100	20.600 150.400
3/21/81	0:30:10	-15 3.504'	75 33.413'	3	13.988	18.428	25.011	666.32	15.711	159.550	2234.00	2.100	24.900 84.000
3/21/81	0:45:11	-15 3.837'	75 33.495'	3	14.496	18.500	25.532	359.83	15.732	159.570	20.00	2.200	23.600 159.600
3/21/81	1:00:11	-15 3.837'	75 33.495'	3	14.657	18.500	25.694	457.71	15.841	158.190	20.00	2.100	24.000 158.300
3/21/81	1:15:12	-15 3.837'	75 33.495'	3	14.635	18.500	24.505	345.76	15.889	179.500	20.00	2.200	22.500 163.800

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APRWSP	APPRDR	SEATEMP	GYROHED	ZULUFX	MANLSPD	TRWDSPD	TRWDIR
3/21/81	1:30:12	-15 3.837'	75 33.495'	3	14.651	18.542	24.736	668.09	15.938	180.640	20.00	2.100	23.600	120.100
3/21/81	1:45:15	-15 3.837'	75 33.495'	3	14.885	18.679	24.934	710.35	16.202	179.330	20.00	2.100	22.900	169.000
3/21/81	2:00:18	-15 3.837'	75 33.495'	3	15.106	18.680	22.455	708.03	16.484	180.850	20.00	2.200	22.600	167.600
3/21/81	2:15:21	-15 7.073'	75 34.859'	3	15.163	18.680	22.054	364.84	16.620	150.970	156.00	2.200	19.800	156.200
3/21/81	2:30:24	-15 7.073'	75 34.859'	3	14.226	18.500	23.174	372.63	16.696	139.690	156.00	1.800	21.500	153.700
3/21/81	2:45:27	-15 7.073'	75 34.859'	3	14.085	18.387	24.562	374.36	16.752	138.550	156.00	1.800	22.800	154.700
3/21/81	3:00:30	-15 7.073'	75 34.859'	3	14.666	18.673	25.680	371.29	16.735	139.970	156.00	1.800	23.900	152.200
3/21/81	3:15:33	-15 7.073'	75 34.859'	3	14.381	18.503	23.960	374.36	16.771	137.940	156.00	1.700	22.300	153.600
3/21/81	3:30:36	-15 7.073'	75 34.859'	3	14.487	18.663	22.694	369.03	16.795	141.250	156.00	1.700	22.900	150.900
3/21/81	3:45:39	-15 7.073'	75 34.859'	3	14.455	18.674	23.345	369.20	16.823	108.040	156.00	2.100	21.200	117.900
3/21/81	4:00:42	-15 7.073'	75 34.859'	3	14.666	18.500	22.448	365.41	16.778	141.770	156.00	2.100	20.300	147.600
3/21/81	4:15:45	-15 8.904'	75 32.738'	7	14.892	18.500	21.694	365.47	16.835	142.010	340.00	2.100	19.800	148.100
3/21/81	4:30:48	-15 8.904'	75 32.738'	7	14.666	18.320	22.728	363.49	16.914	141.850	340.00	2.100	20.600	145.500
3/21/81	4:45:51	-15 8.904'	75 32.738'	7	14.636	18.320	22.103	363.01	16.894	140.730	340.00	2.100	20.000	144.000
3/21/81	5:00:54	-15 9.877'	75 32.039'	3	14.447	18.158	20.774	363.27	16.834	140.580	426.00	2.000	18.700	144.400
3/21/81	5:15:57	-15 9.877'	75 32.039'	3	14.526	18.320	20.944	348.94	16.874	159.720	426.00	2.000	18.500	148.300
3/21/81	5:31:00	-15 9.877'	75 32.039'	3	14.659	18.320	22.160	334.69	17.005	179.460	426.00	4.000	18.500	148.300
3/21/81	5:46:03	-15 9.877'	75 32.039'	3	15.028	18.661	23.184	335.89	17.206	177.330	426.00	4.000	19.700	148.200
3/21/81	6:01:06	-15 18.355'	75 30.166'	4	15.111	18.901	21.397	331.32	17.284	179.550	530.00	4.000	18.100	144.500
3/21/81	6:16:09	-15 18.355'	75 30.166'	4	15.718	19.375	22.598	328.96	17.489	179.580	530.00	4.000	19.100	142.800
3/21/81	6:31:12	-15 18.355'	75 30.166'	4	16.241	19.709	21.637	330.76	18.058	180.430	530.00	4.000	18.200	131.500
3/21/81	6:46:15	-15 13.773'	75 31.373'	3	16.861	19.982	22.664	329.75	18.930	179.130	612.00	4.000	19.300	142.600
3/21/81	7:01:18	-15 13.773'	75 31.373'	3	16.813	20.120	22.538	329.54	19.460	179.280	612.00	4.000	18.900	142.600
3/21/81	7:16:21	-15 13.773'	75 31.373'	3	16.888	20.299	21.429	329.91	19.729	179.520	612.00	4.000	18.100	143.900
3/21/81	7:31:24	-15 13.773'	75 31.373'	3	16.888	20.284	23.051	499.50	19.854	164.650	612.00	4.000	25.000	290.700
3/21/81	7:46:27	-15 13.773'	75 31.373'	3	16.889	20.431	22.722	360.39	20.116	163.830	612.00	4.000	18.800	169.400
3/21/81	8:01:30	-15 13.773'	75 31.373'	3	16.888	20.458	21.894	693.38	20.278	164.180	612.00	4.000	18.200	131.500
3/21/81	8:16:33	-15 13.773'	75 31.373'	3	16.748	20.477	21.809	700.50	20.855	149.470	612.00	4.000	18.000	125.400
3/21/81	8:31:36	-15 13.773'	75 31.373'	3	16.696	20.438	22.283	344.34	21.371	149.840	612.00	4.000	18.500	131.100
3/21/81	8:46:39	-15 13.773'	75 31.373'	3	16.886	20.438	23.658	492.43	21.553	149.850	612.00	4.000	25.400	267.600
3/21/81	9:01:42	-15 13.773'	75 31.373'	3	16.886	20.438	21.870	679.77	21.718	149.850	612.00	4.000	18.700	99.300
3/21/81	9:16:45	-15 24.675'	75 31.500'	3	17.111	20.496	22.553	654.99	21.889	150.040	852.00	4.100	21.200	70.000
3/21/81	9:31:48	-15 24.675'	75 31.500'	3	17.151	20.658	21.444	644.51	22.070	151.270	852.00	4.100	25.700	331.700
3/21/81	9:46:51	-15 24.675'	75 31.500'	3	17.282	20.660	21.494	556.52	22.270	151.270	852.00	4.100	21.400	250.000
3/21/81	10:01:54	-15 24.675'	75 31.500'	3	17.415	20.840	21.142	436.91	22.288	151.030	852.00	4.100	20.000	242.400
3/21/81	10:16:57	-15 24.675'	75 31.500'	3	17.556	21.019	20.150	466.99	22.475	150.150	852.00	4.100	20.000	242.400
3/21/81	10:32:00	-15 28.712'	75 29.629'	2	17.747	21.319	22.117	404.20	22.797	149.090	1000.00	4.000	17.400	132.300
3/21/81	10:47:03	-15 28.712'	75 29.629'	2	17.747	21.319	22.117	404.20	22.797	149.090	1000.00	4.000	18.500	163.100
3/21/81	11:02:06	-15 30.764'	75 28.600'	4	17.999	21.225	3.469	148.95	23.103	345.100	1040.00	4.000	7.300	153.100
3/21/81	11:17:09	-15 30.764'	75 28.600'	4	17.145	20.711	3.655	140.85	22.728	345.520	1040.00	11.400	14.100	157.800
3/21/81	11:32:12	-15 30.764'	75 28.600'	4	17.333	20.840	3.951	134.78	22.128	346.560	1040.00	11.300	13.800	157.100
3/21/81	11:47:15	-15 30.764'	75 28.600'	4	17.110	20.838	3.365	128.23	21.613	346.200	1040.00	11.300	13.400	155.500
3/21/81	12:02:18	-15 30.764'	75 28.600'	4	16.696	20.996	3.108	120.03	21.170	346.340	1040.00	11.300	13.200	153.300
3/21/81	12:17:21	-15 22.164'	75 31.486'	3	16.668	21.020	3.294	119.57	20.311	342.180	1146.00	11.400	13.200	150.000
3/21/81	12:32:24	-15 22.164'	75 31.486'	3	16.451	20.843	3.514	129.40	19.275	343.300	1146.00	11.400	13.700	152.700
3/21/81	12:47:27	-15 22.164'	75 31.486'	3	16.229	20.490	4.230	121.18	18.009	336.210	1146.00	11.400	13.900	141.700
3/21/81	13:02:30	-15 22.164'	75 31.486'	3	14.450	19.812	24.027	364.72	17.066	93.866	1146.00	11.300	12.500	102.900

C BEGIN STATION 4 ZODIAKS AND BINS OVER THE SIDE

3/21/81	13:18:50	-15 22.164'	75 31.486'	3	14.658	19.580	12.235	304.69	16.783	210.980	1146.00	400	12.000	154.000
3/21/81	13:33:50	-15 22.164'	75 31.486'	3	14.998	20.041	13.021	305.83	16.841	212.530	1146.00	400	16.300	170.300
3/21/81	13:48:50	-15 22.164'	75 31.486'	3	14.862	19.940	5.722	299.59	16.875	241.430	1146.00	400	6.100	175.000
3/21/81	14:03:51	-15 22.164'	75 31.486'	3	16.330	20.179	5.707	136.95	16.806	333.130	1146.00	4.700	10.500	133.300
3/21/81	14:18:51	-15 22.164'	75 31.486'	3	14.612	19.523	1.800	83.59	16.416	76.572	1146.00	7.200	7.700	238.600
3/21/81	14:33:51	-15 8.558'	75 36.101'	3	13.987	19.403	2.652	97.99	16.355	81.879	1358.00	7.200	8.100	245.400
3/21/81	14:48:51	-15 8.558'	75 36.101'	3	13.994	19.507	1.388	116.57	16.359	82.700	1358.00	7.200	8.400	256.700
3/21/81	15:03:51	-15 8.558'	75 36.101'	3	14.011	19.579	1.521	322.64	16.546	83.696	1358.00	7.200	5.700	253.300
3/21/81	15:18:51	-15 8.558'	75 36.101'	3	14.229	19.397	1.638	149.81	16.546	83.625	1358.00	7.200	7.700	251.600
3/21/81	15:33:51	-15 8.558'	75 36.101'	3	12.678	19.202	1.400	275.89	16.612	75.973	1358.00	7.300	6.600	245.200

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LONG	FIX	DEM. FUIN	AIR. INCH	APP. WIND	SEA. DIR.	DIR. OF LA	DEPTH	W. WIND	W. WIND	
3/21/81	15:48:51	-15 6.753'	75 36.489'	3	13.995	19.220	1.679	38.32	16.489	92.509	1524.00	7.200	5.700 260.000
3/21/81	16:3:51	-15 6.658'	75 36.678'	2	14.078	19.236	1.815	115.04	16.571	90.576	1544.00	7.300	8.100 262.300
3/21/81	16:18:51	-15 6.658'	75 36.678'	2	15.023	20.592	25.779	363.77	16.397	148.110	1544.00	5.200	19.700 152.900
3/21/81	16:33:51	-15 6.663'	75 36.435'	2	15.435	20.612	8.785	425.03	16.391	123.210	1608.00	1.200	11.800 148.400
3/21/81	16:48:51	-15 6.663'	75 36.435'	2	15.111	19.583	4.792	129.33	16.834	75.114	1608.00	1.200	5.800 207.200
3/21/81	17:3:51	-15 6.663'	75 36.435'	2	15.113	19.574	4.570	124.56	16.754	83.012	1608.00	500	4.900 209.200
3/21/81	17:18:51	-15 6.663'	75 36.435'	2	15.328	19.580	5.263	124.52	16.870	78.925	1608.00	500	5.100 208.800
3/21/81	17:33:51	-15 6.663'	75 36.563'	2	15.113	19.451	6.074	126.97	16.909	78.052	1712.00	500	6.600 207.700
3/21/81	17:48:51	-15 7.291'	75 36.563'	2	15.029	19.564	5.745	128.12	16.937	80.947	1712.00	500	5.500 210.600
3/21/81	18:3:51	-15 7.291'	75 36.563'	2	14.942	19.578	4.730	132.18	16.925	85.763	1712.00	500	5.300 218.000
3/21/81	18:18:51	-15 6.780'	75 36.506'	3	15.545	19.741	5.953	123.85	16.933	76.301	1756.00	500	5.700 204.900
3/21/81	18:33:51	-15 6.780'	75 36.506'	3	15.355	19.515	5.686	121.27	16.932	82.331	1756.00	400	5.700 206.700
3/21/81	18:48:51	-15 6.780'	75 36.506'	3	15.144	19.729	5.684	136.45	16.720	85.460	1756.00	500	5.300 223.500
3/21/81	19:3:51	-15 6.780'	75 36.506'	3	14.893	19.564	5.508	125.06	16.403	83.317	1756.00	500	4.800 211.500
3/21/81	19:18:51	-15 6.780'	75 36.506'	3	15.281	20.300	11.051	294.01	16.136	248.080	1756.00	500	10.200 179.700
3/21/81	19:33:51	-15 6.780'	75 36.506'	3	14.966	20.114	8.116	285.12	16.059	252.990	1756.00	500	7.900 182.400
3/21/81	19:48:51	-15 6.780'	75 36.506'	3	14.526	19.940	8.187	289.85	16.284	251.240	1756.00	500	8.300 171.100
3/21/81	20:3:51	-15 6.780'	75 36.506'	3	16.135	21.368	23.038	360.73	16.191	147.210	1756.00	500	23.200 147.900
3/21/81	20:18:51	-15 6.780'	75 36.506'	3	16.664	22.072	20.348	363.89	16.604	146.050	1756.00	500	20.200 150.500
3/21/81	20:33:51	-15 6.780'	75 36.506'	3	16.857	22.322	23.637	366.00	17.038	147.570	1756.00	400	22.900 154.000
3/21/81	20:48:51	-15 6.780'	75 36.506'	3	16.679	21.027	17.992	314.74	17.174	223.400	1756.00	500	17.500 176.400
3/21/81	21:3:51	-15 7.678'	75 35.750'	3	16.304	20.308	8.607	132.14	17.154	57.569	2036.00	500	8.800 193.500
3/21/81	21:18:51	-15 7.678'	75 35.750'	3	15.634	19.916	5.133	125.09	17.230	68.681	2036.00	500	5.600 199.700
3/21/81	21:33:51	-15 7.678'	75 35.750'	3	15.405	19.760	4.322	126.49	17.359	79.945	2036.00	600	5.300 211.700
3/21/81	21:48:51	-15 7.678'	75 35.750'	3	15.693	19.759	4.316	124.45	17.309	72.513	2036.00	500	5.400 200.100
3/21/81	22:3:51	-15 7.678'	75 35.750'	3	15.033	19.580	6.983	121.74	17.124	62.431	2036.00	400	7.300 191.500
3/21/81	22:18:51	-15 7.678'	75 35.750'	3	15.333	19.580	4.656	120.44	17.158	69.786	2036.00	500	5.200 194.700
3/21/81	22:33:51	-15 7.678'	75 35.750'	3	15.053	19.400	5.387	120.99	17.150	67.750	2036.00	500	6.300 200.800
3/21/81	23:3:51	-15 7.678'	75 35.750'	3	14.836	19.220	6.352	127.43	17.015	67.750	2036.00	500	7.000 198.800
3/21/81	23:18:52	-15 7.678'	75 35.750'	3	15.096	19.047	7.312	119.03	16.943	43.810	2036.00	500	7.500 164.800
3/21/81	23:33:52	-15 7.678'	75 35.750'	3	14.187	18.680	5.839	127.71	16.420	67.356	2036.00	600	6.000 197.400
3/21/81	23:48:53	-15 7.678'	75 35.750'	3	14.670	19.262	19.440	377.56	16.328	137.970	2036.00	6.500	15.300 149.000
3/22/81	0:3:53	-15 6.688'	75 37.478'	3	13.948	18.992	1.843	302.03	16.698	94.386	2036.00	1.500	2.600 308.600
3/22/81	0:18:53	-15 6.688'	75 37.478'	3	14.000	19.040	1.467	302.03	16.698	94.386	2036.00	1.400	2.300 301.400
3/22/81	0:33:53	-15 6.688'	75 37.478'	3	13.948	18.992	1.843	302.03	16.698	94.386	2036.00	1.500	4.400 204.500
3/22/81	1:3:53	-15 6.688'	75 37.478'	3	14.358	18.683	15.740	385.83	16.402	102.640	2328.00	1.400	3.900 222.700
3/22/81	1:18:53	-15 6.688'	75 37.478'	3	13.871	18.501	2.616	109.03	16.357	71.052	2328.00	1.500	2.700 295.000
3/22/81	1:33:53	-15 6.688'	75 37.478'	3	14.020	18.299	3.017	134.47	16.139	76.978	2328.00	1.400	3.300 256.500
3/22/81	1:48:53	-15 6.688'	75 37.478'	3	13.586	18.200	1.758	197.78	16.060	91.337	2328.00	1.500	2.900 258.200
3/22/81	2:3:53	-15 6.688'	75 37.478'	3	13.552	18.146	1.601	140.76	16.021	90.119	2328.00	1.400	4.400 281.900
3/22/81	2:18:53	-15 6.772'	75 36.530'	3	13.555	18.320	2.126	128.70	15.960	92.858	114.00	1.500	4.500 229.300
3/22/81	2:33:53	-15 6.772'	75 36.530'	3	13.548	18.320	3.296	212.70	15.945	97.309	114.00	1.500	2.100 304.000
3/22/81	2:48:53	-15 6.772'	75 36.530'	3	13.695	18.143	3.242	138.97	15.973	71.481	114.00	600	2.800 257.200
3/22/81	3:3:53	-15 6.772'	75 36.530'	3	13.115	17.917	1.469	236.47	15.955	79.948	114.00	600	27.600 161.900
3/22/81	3:18:53	-15 6.772'	75 36.530'	3	13.426	17.962	6.045	216.46	15.925	75.197	114.00	600	21.900 109.900
3/22/81	3:33:53	-15 6.772'	75 36.530'	3	14.645	18.653	27.721	343.27	16.073	179.930	114.00	600	20.700 140.300
3/22/81	4:3:53	-15 6.584'	75 35.851'	3	14.942	18.680	22.723	370.52	16.751	129.390	250.00	2.300	18.900 139.400
3/22/81	4:18:53	-15 6.584'	75 35.851'	3	14.815	18.860	21.636	370.40	16.883	129.950	250.00	2.300	18.500 139.500
3/22/81	4:33:53	-15 6.584'	75 35.851'	3	14.666	18.860	21.079	369.64	16.919	128.880	250.00	2.300	19.100 142.100
3/22/81	4:48:53	-15 6.584'	75 35.851'	3	14.088	18.860	20.806	368.62	16.941	128.910	250.00	2.300	19.900 142.600
3/22/81	5:3:53	-15 6.584'	75 35.851'	3	14.694	18.860	21.297	371.59	17.030	129.400	250.00	2.300	20.400 156.600
3/22/81	5:18:53	-15 6.584'	75 35.851'	3	14.444	18.860	22.240	371.74	17.210	129.650	250.00	2.300	20.000 109.700
3/22/81	5:33:53	-15 10.905'	75 33.687'	3	14.444	18.908	22.363	371.15	17.321	127.850	438.00	2.300	20.700 143.400
3/22/81	5:48:53	-15 10.905'	75 33.687'	3	14.304	19.037	23.021	371.75	17.277	130.600	438.00	2.300	19.600 146.300
3/22/81	6:3:53	-15 11.643'	75 32.911'	4	14.210	19.153	26.005	371.05	17.303	130.790	520.00	2.300	23.700 142.900
3/22/81	6:18:53	-15 11.643'	75 32.911'	4	14.200	19.220	22.372	374.26	17.392	129.270	520.00	2.300	19.800 145.300
3/22/81	6:33:53	-15 11.643'	75 32.911'	4	14.001	19.220	21.183	378.65	17.399	129.280	520.00	2.300	19.100 150.200
3/22/81	6:48:53	-15 11.643'	75 32.911'	4	14.051	19.178	21.797	372.95	17.370	129.580	520.00	2.300	19.600 144.100

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEMPOIN	AIRTEMP	APPRNSP	APPRDOR	SEATEMP	CYRONED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/22/81	6:48:53	-15 11.643'	75 32.911'	4	14.139	19.064	21.244	372.05	17.405	130.740	520.00	2.200	18.800	143.400
3/22/81	7:3:53	-15 11.643'	75 32.911'	4	13.999	19.202	20.754	372.13	17.515	130.940	520.00	2.300	18.300	144.800
3/22/81	7:18:53	-15 11.643'	75 32.911'	4	14.000	19.220	21.363	369.47	17.551	130.450	520.00	2.300	18.900	140.600
3/22/81	7:33:53	-15 11.643'	75 32.911'	4	14.222	19.220	21.489	371.80	17.651	130.390	520.00	2.000	19.700	143.400
3/22/81	7:48:53	-15 11.643'	75 32.911'	4	14.802	19.219	22.857	389.24	17.728	130.030	520.00	2.000	21.000	170.700
3/22/81	8:3:53	-15 11.643'	75 32.911'	4	14.666	19.264	20.849	370.68	17.668	131.220	520.00	2.000	18.800	143.400
3/22/81	8:18:53	-15 11.643'	75 32.911'	4	14.665	19.229	21.162	367.87	17.792	131.390	520.00	2.100	19.200	140.200
3/22/81	8:33:53	-15 15.072'	75 28.993'	2	14.886	19.220	20.169	368.26	17.834	131.140	804.00	2.000	18.000	139.400
3/22/81	8:48:53	-15 15.072'	75 28.993'	2	15.110	19.349	21.331	368.21	17.892	129.450	804.00	2.000	19.200	137.900
3/22/81	9:3:53	-15 15.072'	75 28.993'	2	15.251	19.228	20.779	365.16	17.987	130.000	804.00	2.000	18.700	135.700
3/22/81	9:18:53	-15 15.072'	75 28.993'	2	15.332	19.226	21.225	365.57	18.090	129.240	804.00	2.000	19.000	134.500
3/22/81	9:33:53	-15 15.072'	75 28.993'	2	15.472	19.226	21.381	401.79	18.098	129.950	804.00	2.000	20.700	190.600
3/22/81	9:48:53	-15 15.072'	75 28.993'	2	15.111	19.065	20.902	387.29	18.096	131.200	804.00	2.100	19.100	171.000
3/22/81	10:3:53	-15 15.072'	75 28.993'	2	14.971	19.040	20.267	374.69	18.165	130.590	804.00	2.000	18.400	149.900
3/22/81	10:18:53	-15 16.944'	75 25.799'	3	15.112	19.040	20.638	368.84	18.129	129.430	948.00	2.000	18.200	139.200
3/22/81	10:33:53	-15 16.944'	75 25.799'	3	14.969	19.040	21.130	365.75	18.091	130.450	948.00	2.000	18.400	137.600
3/22/81	10:48:53	-15 16.944'	75 25.799'	3	14.889	19.032	21.286	367.41	18.000	130.460	948.00	2.200	19.100	138.700
3/22/81	11:3:53	-15 16.944'	75 25.799'	3	14.668	18.860	21.425	375.51	17.877	127.120	948.00	2.200	19.500	144.400
3/22/81	11:18:53	-15 18.414'	75 23.672'	3	14.880	18.860	9.975	280.86	17.732	250.010	1058.00	2.200	11.900	181.800
3/22/81	11:33:53	-15 18.414'	75 23.672'	3	15.551	19.039	982	290.52	17.913	293.670	1058.00	2.300	2.100	136.200
3/22/81	11:48:53	-15 18.414'	75 23.672'	3	15.776	19.262	840	297.68	18.028	311.450	1058.00	2.200	1.900	150.200
3/22/81	12:3:53	-15 18.414'	75 23.672'	3	15.925	19.693	1.210	294.53	17.542	310.960	1058.00	2.300	2.100	165.200
3/22/81	12:18:53	-15 18.414'	75 23.672'	3	15.992	20.558	2.632	331.46	16.787	312.080	1058.00	2.200	1.200	232.900
3/22/81	12:33:53	-15 18.414'	75 23.672'	3	16.019	20.838	822	402.04	16.439	327.830	1058.00	2.200	1.600	131.400
3/22/81	12:48:53	-15 18.414'	75 23.672'	3	14.980	19.595	4.201	484.52	15.931	331.550	1058.00	2.200	5.700	115.700
3/22/81	13:3:55	-15 18.414'	75 23.672'	3	14.252	19.007	6.867	246.11	15.854	245.590	1058.00	2.300	8.200	114.400
3/22/81	13:18:55	-15 8.108'	75 35.785'	4	13.781	18.680	7.818	229.98	15.858	253.980	1244.00	2.300	9.400	112.600

C ATMOSPHERIC QDT UNDER WAY 03:00Z 21/3/81 BACK ON STATION 4 AT 13:00Z 22/3/81

3/22/81	13:33:55	-15 8.108'	75 35.785'	4	13.751	18.498	6.028	231.22	15.890	249.720	1244.00	2.200	7.400	109.400
3/22/81	13:48:58	-15 8.108'	75 35.785'	4	13.778	18.460	5.899	251.25	15.885	245.240	1244.00	0.000	6.000	135.900
3/22/81	14:4:1	-15 8.108'	75 35.785'	4	13.705	18.500	5.243	238.76	15.928	255.320	1244.00	0.000	5.200	135.000
3/22/81	14:19:4	-15 8.108'	75 35.785'	4	13.614	18.680	5.438	238.32	15.936	248.040	1244.00	0.000	5.400	126.000
3/22/81	14:34:7	-15 8.108'	75 35.785'	4	13.695	19.006	5.725	206.17	15.983	269.170	1244.00	0.000	5.600	116.500
3/22/81	14:49:10	-15 8.108'	75 35.785'	4	13.207	19.239	3.749	245.26	16.142	258.080	1244.00	0.000	3.700	143.600
3/22/81	15:4:13	-15 8.108'	75 35.785'	4	14.079	19.513	4.404	251.09	16.211	254.490	1244.00	0.000	4.300	146.500
3/22/81	15:19:16	-15 8.108'	75 35.785'	4	14.222	19.702	3.407	261.63	16.214	255.100	1244.00	0.000	3.300	156.300
3/22/81	15:34:23	-15 8.108'	75 35.785'	4	14.584	19.760	3.897	234.39	16.306	276.130	1244.00	0.000	4.000	150.200
3/22/81	15:49:24	-15 7.565'	75 36.294'	3	14.522	20.146	2.939	270.26	16.278	248.860	1522.00	0.000	2.900	159.100
3/22/81	16:4:28	-15 7.565'	75 36.294'	3	14.951	20.528	2.772	256.54	16.553	255.750	1522.00	0.000	2.500	152.000
3/22/81	16:19:32	-15 7.565'	75 36.294'	3	15.766	21.363	1.853	260.97	16.525	261.400	1522.00	0.000	1.600	162.100
3/22/81	16:34:36	-15 7.565'	75 36.294'	3	15.924	21.202	4.111	279.38	16.578	257.540	1522.00	0.000	4.100	176.900
3/22/81	16:49:40	-15 6.743'	75 36.189'	5	15.977	21.099	5.881	277.51	16.724	255.090	1622.00	0.000	6.000	172.600
3/22/81	17:4:44	-15 6.743'	75 36.189'	5	16.004	20.840	6.322	275.69	16.632	262.270	1622.00	0.000	6.300	178.100
3/22/81	17:19:48	-15 6.743'	75 36.189'	5	15.559	20.480	6.524	288.11	16.379	261.540	1622.00	0.000	6.400	186.800
3/22/81	17:34:52	-15 6.504'	75 36.987'	4	15.334	20.139	8.325	273.09	16.255	259.660	1702.00	0.000	8.100	174.600
3/22/81	17:49:56	-15 6.504'	75 36.987'	4	15.162	20.299	9.295	273.56	16.312	257.340	1702.00	0.000	8.900	171.300
3/22/81	18:5:0	-15 6.504'	75 36.987'	4	16.428	21.794	19.970	341.39	16.239	179.710	1702.00	0.000	19.600	161.400
3/22/81	18:20:5	-15 6.504'	75 36.987'	4	16.671	21.707	22.291	339.33	16.208	180.610	1702.00	0.000	21.700	160.100
3/22/81	18:35:5	-15 6.504'	75 36.987'	4	13.312	21.742	12.864	301.43	16.171	234.200	1702.00	0.000	13.400	174.200
3/22/81	18:50:5	-15 6.504'	75 36.987'	4	16.326	20.047	8.853	127.45	16.370	42.554	1702.00	0.000	8.900	169.500
3/22/81	19:5:5	-15 6.504'	75 36.987'	4	15.473	19.580	12.119	131.30	16.260	29.909	1702.00	0.000	11.900	161.100
3/22/81	19:20:5	-15 6.504'	75 36.987'	4	15.333	19.751	10.840	285.03	16.239	244.900	1702.00	0.000	10.900	170.800
3/22/81	19:35:5	-15 6.504'	75 36.987'	4	15.302	19.938	8.115	288.11	16.016	253.260	1702.00	0.000	7.900	181.500
3/22/81	19:50:5	-15 6.504'	75 36.987'	4	14.709	19.938	2.091	153.59	17.016	89.275	1702.00	0.000	2.200	240.900
3/22/81	20:5:5	-15 6.504'	75 36.987'	4	15.201	19.583	4.933	122.18	16.939	85.672	1702.00	0.000	5.030	206.700
3/22/81	20:20:5	-15 6.553'	75 36.758'	3	15.477	19.580	7.188	133.47	16.724	85.792	1950.00	0.000	7.300	221.100
3/22/81	20:35:5	-15 6.553'	75 36.758'	3	15.574	19.783	6.225	117.74	16.529	79.034	1950.00	0.000	6.100	196.100
3/22/81	20:50:5	-15 6.553'	75 36.758'	3	15.195	19.874	6.804	114.45	16.487	77.267	1950.00	0.000	7.300	195.100

3/22/81	21: 5:	5	-15	6.653'	75 36.758'	3	15.301	19.760	6.191	124.58	16.408	41.827	1950.03	0.000	6.100	165.390
3/22/81	21:20:	5	-15	6.653'	75 36.758'	3	15.428	20.292	19.450	324.05	16.249	197.750	1950.00	0.000	19.200	160.900
3/22/81	21:35:	5	-15	6.653'	75 36.758'	3	15.333	20.480	13.186	347.85	16.078	139.100	1950.00	0.000	13.000	126.900
3/22/81	21:50:	5	-15	6.653'	75 36.758'	3	14.708	19.425	5.799	134.49	16.106	65.353	1950.00	0.000	5.700	198.900
3/22/81	22: 5:	5	-15	6.244'	75 36.415'	2	14.029	19.399	1.581	171.98	16.114	78.576	2132.00	0.000	1.700	227.800
3/22/81	22:20:	5	-15	6.244'	75 36.415'	2	15.967	20.306	22.503	354.88	15.929	149.040	2132.00	0.000	22.400	144.000
3/22/81	22:35:	5	-15	6.244'	75 36.415'	2	15.345	20.010	18.527	352.57	16.002	150.210	2132.00	2.600	15.900	141.100
3/22/81	22:50:	5	-15	6.244'	75 36.415'	2	15.472	20.111	23.681	361.83	16.087	150.260	2132.00	2.600	21.100	152.700
3/22/81	23: 5:	5	-15	7.536'	75 35.666'	3	15.333	19.941	24.829	679.14	16.348	150.970	2240.00	2.600	23.000	101.200
3/22/81	23:20:	5	-15	7.536'	75 35.666'	3	15.130	19.760	26.831	627.43	16.013	151.940	2240.00	2.600	27.300	44.800
3/22/81	23:35:	5	-15	7.536'	75 35.666'	3	15.285	19.760	26.011	560.28	16.257	149.970	2240.00	2.300	27.500	10.000
3/22/81	23:50:	5	-15	7.536'	75 35.666'	3	15.333	19.580	27.515	616.37	16.438	149.700	2240.00	2.300	28.400	30.400
3/22/81	0: 5:	5	-15	7.536'	75 35.666'	3	15.525	19.580	25.177	470.98	16.497	150.570	2240.00	2.300	25.000	238.900
3/22/81	0:20:	5	-15	7.536'	75 35.666'	3	15.555	19.580	24.612	564.38	16.476	148.350	2240.00	2.200	26.700	12.100
3/23/81	0:35:	5	-15	7.536'	75 35.666'	3	15.334	19.580	23.208	466.71	16.737	147.900	2240.00	2.400	24.400	271.200
3/23/81	0:50:	5	-15	11.815'	75 33.248'	3	15.695	19.759	21.975	635.44	16.975	149.630	28.00	2.400	22.000	50.500
3/23/81	1: 5:	5	-15	11.815'	75 33.248'	3	15.532	19.760	18.431	342.25	17.561	149.190	28.00	2.500	15.900	158.900

C ATMOSPHERIC SAMPLING BEGAN AT 10:10Z

3/23/81	1:20:	7	-15	11.815'	75 33.248'	3	15.419	19.580	15.831	338.30	18.175	150.500	28.00	2.500	14.000	124.600
3/23/81	1:35:	7	-15	11.815'	75 33.248'	3	15.607	19.580	15.421	339.27	18.757	150.960	28.00	2.600	12.900	127.900
3/23/81	1:50:	7	-15	11.815'	75 33.248'	3	15.555	19.580	14.252	340.53	19.074	150.670	28.00	2.700	12.000	126.400
3/23/81	2: 5:	7	-15	11.815'	75 33.248'	3	15.606	19.580	15.827	344.76	19.358	150.210	28.00	2.700	13.600	130.700
3/23/81	2:20:	7	-15	14.974'	75 31.781'	4	15.758	19.638	15.752	344.97	19.494	150.880	150.00	2.600	13.500	132.300
3/23/81	2:35:	7	-15	14.974'	75 31.781'	4	15.585	19.760	16.725	344.42	19.654	151.870	150.00	2.600	14.600	133.500
3/23/81	2:50:	7	-15	14.974'	75 31.781'	4	15.558	19.890	17.146	353.47	20.037	149.790	150.00	2.600	14.300	139.300
3/23/81	3: 5:	7	-15	14.974'	75 31.781'	4	15.329	19.760	18.564	363.17	20.090	120.290	150.00	2.700	15.400	122.500
3/23/81	3:20:	7	-15	14.974'	75 31.781'	4	15.111	19.760	18.603	365.04	19.923	119.780	150.00	2.600	15.900	125.800
3/23/81	3:35:	7	-15	14.974'	75 31.781'	4	15.059	19.760	18.454	363.86	19.761	120.550	150.00	2.700	15.800	125.700
3/23/81	3:50:	7	-15	14.974'	75 31.781'	4	15.111	19.760	19.240	361.56	19.710	121.610	150.00	2.700	16.600	124.300
3/23/81	4: 5:	7	-15	14.974'	75 31.781'	4	15.110	19.760	20.493	365.26	19.572	120.420	150.00	2.700	17.700	128.000
3/23/81	4:20:	7	-15	17.399'	75 29.553'	3	14.746	19.760	21.463	367.65	19.343	119.480	348.00	2.600	16.400	129.500
3/23/81	4:35:	7	-15	17.399'	75 29.553'	3	14.444	19.580	18.828	368.65	19.467	118.250	348.00	2.600	16.300	129.800
3/23/81	4:50:	7	-15	17.935'	75 28.509'	3	14.666	19.536	16.779	366.33	19.218	119.180	428.00	2.600	14.300	127.100
3/23/81	5: 5:	7	-15	17.936'	75 28.509'	3	14.888	19.402	18.546	370.69	19.027	119.220	428.00	2.600	16.000	131.100
3/23/81	5:20:	7	-15	17.936'	75 28.509'	3	14.866	19.400	19.052	368.56	18.857	118.340	428.00	2.600	16.200	127.600
3/23/81	5:35:	7	-15	17.936'	75 28.509'	3	14.656	19.400	18.922	366.18	18.693	126.430	428.00	2.600	16.100	137.200
3/23/81	5:50:	7	-15	17.936'	75 28.509'	3	15.252	19.622	20.356	385.07	18.659	159.680	428.00	4.100	15.900	146.600
3/23/81	6: 5:	7	-15	17.936'	75 28.509'	3	15.562	19.759	21.116	696.72	18.684	160.010	428.00	4.100	17.600	120.200
3/23/81	6:20:	7	-15	17.936'	75 28.509'	3	15.721	19.940	22.069	707.24	18.931	159.510	428.00	4.100	18.200	143.500
3/23/81	6:35:	7	-15	17.936'	75 28.509'	3	15.995	20.102	20.773	694.76	19.334	169.720	428.00	4.200	17.200	138.400
3/23/81	6:50:	7	-15	17.936'	75 28.509'	3	16.362	20.292	21.028	344.50	19.857	164.410	428.00	4.200	17.000	144.100
3/23/81	7: 5:	7	-15	17.936'	75 28.509'	3	16.729	20.316	21.274	671.82	20.442	160.560	428.00	4.200	19.500	81.000
3/23/81	7:20:	7	-15	17.936'	75 28.509'	3	16.888	20.635	23.129	524.76	20.736	160.640	428.00	4.200	27.200	347.900
3/23/81	7:35:	7	-15	25.016'	75 24.563'	2	17.384	20.839	23.036	426.85	20.786	159.750	714.00	3.800	26.800	295.800
3/23/81	7:50:	7	-15	25.016'	75 24.563'	2	17.706	21.036	25.418	569.12	20.973	159.590	714.00	3.800	26.200	287.900
3/23/81	8: 5:	7	-15	25.016'	75 24.563'	2	18.189	21.377	25.483	463.00	21.534	159.790	714.00	3.900	28.100	315.200
3/23/81	8:20:	7	-15	25.016'	75 24.563'	2	18.195	21.560	26.608	437.19	22.110	160.500	714.00	3.900	26.500	255.600
3/23/81	8:35:	7	-15	25.016'	75 24.563'	2	18.222	21.560	26.631	578.34	22.946	160.670	714.00	3.400	28.400	303.300
3/23/81	8:50:	7	-15	25.016'	75 24.563'	2	18.362	21.775	27.006	531.15	22.946	160.360	714.00	3.400	28.100	284.700
3/23/81	9: 5:	7	-15	25.016'	75 24.563'	2	18.453	21.683	28.147	566.94	23.355	161.500	714.00	3.400	31.700	320.500
3/23/81	9:20:	7	-15	30.802'	75 23.911'	3	18.293	21.748	27.402	579.60	23.694	161.360	858.00	3.400	31.800	29.000
3/23/81	9:35:	7	-15	30.802'	75 23.911'	3	18.452	21.947	27.735	556.28	23.958	161.010	858.00	3.100	32.300	355.600
3/23/81	9:50:	7	-15	30.802'	75 23.911'	3	18.659	22.255	28.622	653.60	24.186	159.500	858.00	3.200	25.400	118.900
3/23/81	10: 5:	7	-15	30.802'	75 23.911'	3	18.475	22.214	31.878	676.61	24.346	160.330	858.00	3.200	29.900	95.000
3/23/81	10:20:	7	-15	30.802'	75 23.911'	3	19.955	22.230	14.848	137.87	24.458	332.870	858.00	3.100	17.100	117.900
3/23/81	10:35:	7	-15	34.312'	75 24.116'	3	20.004	22.261	15.355	139.15	24.148	330.400	1008.00	11.700	24.500	130.300
3/23/81	10:50:	7	-15	34.312'	75 24.116'	3	19.859	21.944	11.832	142.97	23.333	332.870	1008.00	11.700	22.400	135.600
3/23/81	11: 5:	9	-15	34.312'	75 24.116'	3	19.356	21.363	7.812	142.02	21.857	332.580	1008.00	11.700	19.500	134.200

DATE	TIME	DEC.	MIN-LAT	DEC.	MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	SEATEMP	CYNOCHD	ZULUFX	MANUSPD	TRWDSPD	TRWDIR
3/23/81	11:20	9	-15 27.718'	75 28.127'	2	17.860	20.728	4.835	121.60	20.959	343.540	1048.00	11.700	14.600	146.900
3/23/81	11:35	9	-15 27.718'	75 28.127'	2	17.183	20.129	9.545	129.62	19.899	342.700	1048.00	11.700	19.400	140.200
3/23/81	11:50	9	-15 27.718'	75 28.127'	2	16.530	19.940	6.904	132.54	19.384	344.300	1048.00	11.700	17.200	145.200
3/23/81	12:05	9	-15 27.718'	75 28.127'	2	16.425	19.760	7.320	130.35	19.117	343.290	1048.00	11.700	19.900	142.600
3/23/81	12:20	9	-15 15.723'	75 33.153'	3	15.595	19.239	7.755	131.33	17.445	177.710	1154.00	11.700	19.700	335.100
3/23/81	12:35	9	-15 15.723'	75 33.153'	3	13.945	18.567	9.748	133.25	16.232	163.260	1154.00	11.700	19.000	322.900
3/23/81	12:50	9	-15 15.723'	75 33.153'	3	13.323	19.040	8.487	279.49	16.190	249.380	1154.00	11.700	13.000	108.200
3/23/81	13:05	9	-15 15.723'	75 33.153'	3	13.001	19.063	7.787	304.00	16.223	245.940	1154.00	11.700	11.400	105.700

C ATMOSPHERIC COMPLETED ZODIAK AND BIMS OVER THE SIDE

3/23/81	13:20	10	-15 15.723'	75 33.153'	3	13.111	19.034	6.831	274.68	16.234	248.180	1154.00	0.000	6.800	165.500
3/23/81	13:35	10	-15 15.723'	75 33.153'	3	13.162	18.860	7.086	284.62	16.281	245.920	1154.00	0.000	7.000	173.900
3/23/81	13:50	15	-15 7.401'	75 35.837'	3	13.100	18.860	13.545	299.96	16.350	245.740	1328.00	0.000	13.500	185.200
3/23/81	14:05	15	-15 7.401'	75 35.837'	3	12.996	19.096	22.227	377.55	16.217	130.200	1328.00	0.000	21.700	149.200
3/23/81	14:20	15	-15 7.205'	75 36.113'	8	13.213	18.629	11.376	156.80	16.194	203.840	1350.00	0.000	10.500	700
3/23/81	14:35	15	-15 7.205'	75 36.113'	8	12.929	18.899	4.422	193.66	16.255	86.053	1350.00	0.000	4.000	243.000
3/23/81	14:50	15	-15 7.205'	75 36.113'	8	14.758	18.860	19.959	144.76	16.322	176.370	1350.00	0.000	19.800	320.600
3/23/81	15:05	15	-15 7.205'	75 36.113'	8	14.046	18.860	8.782	121.94	16.380	48.158	1350.00	0.000	8.300	167.400
3/23/81	15:20	15	-15 7.205'	75 36.113'	8	13.406	19.196	10.252	291.11	16.476	233.340	1350.00	0.000	10.600	170.800
3/23/81	15:35	15	-15 7.345'	75 36.958'	3	14.382	19.229	13.847	142.35	16.531	41.356	1512.00	0.000	14.200	182.500
3/23/81	15:50	15	-15 7.345'	75 36.958'	3	13.745	18.747	6.064	136.81	16.379	41.432	1512.00	0.000	6.600	194.300
3/23/81	16:05	15	-15 7.022'	75 37.188'	4	13.514	18.681	7.469	132.94	16.328	78.796	1532.00	6.600	12.300	234.100
3/23/81	16:20	15	-15 7.022'	75 37.188'	4	13.623	18.680	7.167	131.04	16.321	73.221	1532.00	6.600	12.500	226.400
3/23/81	16:35	15	-15 4.723'	75 34.997'	3	13.796	18.658	6.845	135.46	16.301	70.334	1610.00	6.600	12.300	227.700
3/23/81	16:50	15	-15 4.723'	75 34.997'	3	13.755	18.680	6.350	121.35	16.314	78.768	1610.00	6.600	10.700	229.700
3/23/81	17:05	15	-15 4.723'	75 34.997'	3	13.134	18.638	6.296	127.92	16.534	76.328	1610.00	6.600	11.100	231.200
3/23/81	17:20	15	-15 4.723'	75 34.997'	3	13.333	18.500	5.241	124.44	16.778	72.094	1610.00	6.600	11.500	229.500
3/23/81	17:35	15	-15 4.256'	75 35.249'	2	13.335	18.329	6.214	136.69	16.793	72.118	1724.00	6.600	10.300	227.600
3/23/81	17:50	15	-15 4.256'	75 35.249'	2	12.459	18.722	29.792	388.36	16.757	104.020	1724.00	6.600	24.100	139.500
3/23/81	18:05	15	-15 3.369'	75 34.600'	3	10.480	19.058	32.483	389.14	16.490	104.080	1758.00	6.600	26.800	140.800
3/23/81	18:20	15	-15 3.369'	75 34.600'	3	12.153	19.245	28.526	391.24	16.293	107.250	1758.00	6.600	23.200	147.000
3/23/81	18:35	15	-15 3.369'	75 34.600'	3	12.244	19.222	30.919	390.35	16.115	108.600	1758.00	6.600	25.300	146.600
3/23/81	18:50	15	-15 3.369'	75 34.600'	3	12.225	19.400	31.991	390.94	15.862	110.390	1758.00	6.600	26.500	148.400
3/23/81	19:05	15	-15 3.369'	75 34.600'	3	13.095	18.887	8.400	128.82	15.497	66.791	1758.00	9.000	8.500	197.100
3/23/81	19:20	15	-15 3.369'	75 34.600'	3	13.111	18.796	5.193	133.05	15.371	65.375	1758.00	9.000	6.300	206.200
3/23/81	19:35	15	-15 3.369'	75 34.600'	3	13.326	18.860	10.315	124.69	15.342	59.023	1758.00	9.000	10.000	186.500
3/23/81	19:50	15	-15 3.369'	75 34.600'	3	13.713	18.902	6.656	125.81	15.328	58.617	1758.00	9.000	6.700	189.700
3/23/81	20:05	15	-15 3.369'	75 34.600'	3	13.773	19.148	8.288	137.44	15.353	59.290	1758.00	9.000	8.300	202.500
3/23/81	20:20	15	-15 3.369'	75 34.600'	3	13.887	19.211	19.121	137.90	15.391	41.301	1758.00	9.000	19.800	179.100
3/23/81	20:35	15	-15 3.369'	75 34.600'	3	14.444	19.220	26.641	137.30	15.439	27.345	1758.00	9.000	27.300	166.600
3/23/81	20:50	15	-15 2.829'	75 27.555'	3	13.415	19.684	16.938	263.74	15.464	211.340	2044.00	9.000	16.500	106.800
3/23/81	21:05	15	-15 2.829'	75 27.555'	3	13.455	19.245	8.242	314.73	15.850	270.630	2044.00	11.300	8.400	137.100
3/23/81	21:20	15	-15 2.829'	75 27.555'	3	13.115	18.513	8.806	304.12	16.377	269.440	2044.00	11.300	9.500	137.600
3/23/81	21:35	15	-15 2.829'	75 27.555'	3	13.553	19.070	14.260	340.93	16.742	123.610	2044.00	11.400	8.900	41.800
3/23/81	21:50	15	-15 2.829'	75 27.555'	3	13.333	19.155	3.305	173.40	16.705	101.580	2044.00	11.400	14.500	275.700
3/23/81	22:05	15	-15 2.112'	75 36.324'	2	13.109	19.100	16.237	385.58	16.774	104.850	2154.00	1.400	16.800	141.200
3/23/81	22:20	15	-15 2.112'	75 36.324'	2	13.941	18.861	23.251	697.58	16.859	165.800	2154.00	1.400	21.800	142.600
3/23/81	22:35	15	-15 2.112'	75 36.324'	2	13.698	18.790	22.745	397.43	16.739	170.000	2154.00	2.000	21.000	217.800

C ATMOSPHERIC UNDER WAY 22:00Z

3/23/81	23:05	15	-15 2.187'	75 35.401'	3	14.139	18.980	27.444	347.16	16.658	172.940	2232.00	2.000	25.900	156.700
3/23/81	23:20	16	-15 2.187'	75 35.401'	3	13.556	18.680	29.179	344.63	16.698	174.300	2232.00	2.000	27.500	157.800
3/23/81	23:35	18	-15 2.187'	75 35.401'	3	13.556	18.632	28.854	348.54	16.599	170.040	2232.00	3.000	26.400	157.800
3/23/81	23:50	18	-15 2.187'	75 35.401'	3	13.918	18.680	28.904	511.58	16.555	170.080	2232.00	3.100	29.700	279.300
3/23/81	0:05	18	-15 4.515'	75 36.185'	3	13.329	18.387	27.881	394.42	16.441	169.530	2338.00	3.000	26.800	237.900
3/24/81	0:20	18	-15 4.515'	75 36.185'	3	13.063	18.320	27.169	695.40	16.310	170.840	2338.00	3.100	26.100	144.000
3/24/81	0:35	18	-15 4.515'	75 36.185'	3	13.333	18.362	27.485	337.00	16.249	171.370	2338.00	3.100	24.300	145.900

[illegible]

C NO BIMS OR ZODIAKS TODAY HYDROCASTING AND CORING SCHEDULED FOR TODAY

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPRNSP	APPRDPR	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
3/24/81	15: 5:21	-15 8.342'	75 35.459'	5	12.443	17.609	4.337	123.81	15.463	73.966	1444.00	1.200	6.200	211.200
3/24/81	15: 20:21	-15 8.342'	75 35.459'	5	12.732	18.052	22.537	181.17	15.478	325.030	1444.00	1.200	23.500	142.000
3/24/81	15: 35:21	-15 8.342'	75 35.459'	5	13.313	18.098	7.363	117.60	15.449	62.316	1444.00	1.100	9.100	108.100
3/24/81	15: 50:21	-15 8.342'	75 35.459'	5	12.869	17.959	5.110	143.24	15.511	65.944	1444.00	1.200	6.100	218.800
3/24/81	16: 5:22	-15 8.342'	75 35.459'	5	12.670	17.912	4.342	119.84	15.498	61.716	1444.00	1.100	5.100	196.300
3/24/81	16: 20:24	-15 8.853'	75 35.817'	3	12.444	17.780	5.517	127.29	15.490	68.657	1550.00	1.100	6.300	198.400
3/24/81	16: 35:24	-15 8.853'	75 35.817'	3	12.455	17.772	5.133	122.82	15.486	72.125	1550.00	1.100	4.200	204.700
3/24/81	16: 50:24	-15 8.853'	75 35.817'	3	12.455	17.780	3.907	127.96	15.400	70.636	1550.00	1.100	4.900	224.700
3/24/81	17: 5:24	-15 8.181'	75 36.126'	3	12.655	17.780	4.105	123.84	15.403	71.064	1632.00	1.100	3.800	205.400
3/24/81	17: 20:24	-15 7.684'	75 36.479'	3	12.685	17.942	4.477	132.65	15.519	70.646	1632.00	1.200	4.600	205.800
3/24/81	17: 35:24	-15 7.684'	75 36.479'	3	12.453	17.958	4.929	130.11	15.631	77.613	1704.00	1.100	5.300	213.600
3/24/81	17: 50:24	-15 7.684'	75 36.479'	3	13.035	17.960	3.850	118.46	15.698	72.455	1704.00	1.200	4.400	206.500
3/24/81	18: 5:24	-15 7.684'	75 36.479'	3	12.173	18.080	4.836	129.50	15.780	71.551	1704.00	1.100	5.000	203.600
3/24/81	18: 20:24	-15 7.684'	75 36.479'	3	13.246	18.140	3.383	120.82	15.844	70.855	1704.00	1.200	3.600	201.300
3/24/81	18: 35:24	-15 7.684'	75 36.479'	3	13.073	18.004	5.941	117.60	15.887	67.813	1704.00	1.100	6.500	194.900
3/24/81	18: 50:24	-15 7.684'	75 36.479'	3	12.897	18.140	4.718	120.49	15.941	74.090	1704.00	1.100	6.200	204.900
3/24/81	19: 5:24	-15 7.684'	75 36.479'	3	12.918	17.961	4.978	290.81	15.953	70.531	1704.00	1.100	5.300	287.400
3/24/81	19: 20:24	-15 7.684'	75 36.479'	3	13.110	18.139	5.396	120.68	16.001	73.397	1704.00	1.100	6.400	202.500
3/24/81	19: 35:24	-15 7.684'	75 36.479'	3	13.110	18.188	5.470	135.76	16.008	69.628	1704.00	1.200	6.300	208.200
3/24/81	19: 50:26	-15 7.684'	75 36.479'	3	12.445	18.135	3.870	143.26	15.888	73.649	1704.00	1.200	4.900	229.300
3/24/81	20: 5:26	-15 7.684'	75 36.479'	3	11.443	17.496	1.312	175.02	15.756	74.827	1704.00	1.100	2.500	273.800
3/24/81	20: 20:26	-15 4.979'	75 35.181'	3	12.252	17.771	7.593	129.70	15.640	61.815	1934.00	1.100	8.500	196.300
3/24/81	20: 35:26	-15 4.979'	75 35.181'	3	12.175	17.423	6.007	121.39	15.672	58.647	1934.00	1.100	5.800	187.100
3/24/81	21: 5:26	-15 4.979'	75 35.181'	3	11.999	17.933	5.793	120.03	15.676	63.976	1934.00	1.100	6.100	192.300
3/24/81	21: 20:26	-15 4.979'	75 35.181'	3	12.572	17.657	4.691	125.55	15.674	63.266	1934.00	1.100	5.200	200.500
3/24/81	21: 35:26	-15 4.979'	75 35.181'	3	12.424	17.894	21.424	321.90	15.666	227.330	1934.00	1.200	19.600	185.600
3/24/81	21: 50:26	-15 4.979'	75 35.181'	3	13.015	18.642	11.693	158.88	15.850	65.272	1934.00	1.100	11.900	233.200
3/24/81	22: 5:26	-15 5.100'	75 35.910'	3	13.113	18.317	5.601	123.45	15.927	71.728	2142.00	1.200	6.500	209.600
3/24/81	22: 20:26	-15 5.100'	75 35.910'	3	13.389	18.263	4.509	131.19	15.926	65.364	2142.00	1.200	5.300	209.500
3/24/81	22: 35:26	-15 5.100'	75 35.910'	3	12.748	17.805	4.380	123.38	15.923	68.136	2142.00	1.200	6.300	207.400
3/24/81	23: 5:26	-15 5.100'	75 35.910'	3	12.647	17.780	5.014	127.63	15.923	74.785	2142.00	1.100	5.800	210.100
3/24/81	23: 20:26	-15 5.100'	75 35.910'	3	11.643	17.308	5.369	127.05	15.923	75.983	2142.00	1.100	4.600	213.200
3/24/81	23: 35:26	-15 4.559'	75 35.854'	3	11.697	17.240	18.098	26.08	15.795	105.920	2252.00	4.000	15.000	139.100
3/24/81	23: 50:26	-15 4.559'	75 35.854'	3	11.801	17.060	4.130	126.12	15.660	73.111	2252.00	4.000	7.300	227.000
3/24/81	0: 5:26	-15 4.559'	75 35.854'	3	11.554	17.000	22.105	331.73	15.621	207.510	2252.00	4.000	17.900	172.200
3/24/81	0: 20:26	-15 4.559'	75 35.854'	3	12.187	17.591	26.580	329.68	15.794	210.000	2252.00	4.000	22.900	174.600
3/25/81	0: 35:26	-15 4.559'	75 35.854'	3	12.666	17.622	4.645	128.62	15.737	208.230	2252.00	4.000	19.900	170.200
3/25/81	0: 50:26	-15 4.559'	75 35.854'	3	12.646	17.585	6.147	132.96	15.616	69.329	2252.00	4.000	7.600	222.800
3/25/81	1: 5:26	-15 8.644'	75 37.163'	2	12.349	324.59	23.349	324.59	15.638	148.270	36.00	4.000	19.500	95.000
3/25/81	1: 20:26	-15 8.644'	75 37.163'	2	12.366	17.714	23.993	348.77	15.659	169.490	36.00	4.000	20.800	156.800
3/25/81	1: 35:28	-15 8.644'	75 37.163'	2	12.717	17.763	20.388	334.12	15.876	189.340	36.00	4.000	16.600	154.800
3/25/81	1: 50:28	-15 9.975'	75 36.487'	2	12.655	17.600	6.466	129.63	15.957	66.254	120.00	4.000	9.300	216.400
3/25/81	2: 5:28	-15 9.975'	75 36.487'	2	12.526	17.579	5.421	138.93	15.954	65.694	120.00	4.000	8.500	220.500
3/25/81	2: 20:28	-15 9.975'	75 36.487'	2	12.444	17.422	5.298	136.29	15.935	65.135	120.00	4.000	9.500	215.700
3/25/81	2: 35:28	-15 10.221'	75 37.118'	3	12.223	17.420	5.969	126.21	15.820	62.296	212.00	4.000	9.200	209.200
3/25/81	2: 50:28	-15 10.221'	75 37.118'	3	12.304	17.354	5.938	137.28	15.723	60.771	212.00	4.000	9.300	210.700
3/25/81	3: 5:28	-15 10.221'	75 37.118'	3	12.222	17.200	4.493	129.72	15.676	56.675	212.00	4.000	7.500	208.500
3/25/81	3: 20:28	-15 10.221'	75 37.118'	3	11.866	17.240	6.123	194.44	15.627	170.230	212.00	4.000	10.200	355.900
3/25/81	3: 35:28	-15 10.221'	75 37.118'	3	11.777	17.060	1.985	248.62	15.838	308.100	212.00	4.000	4.800	146.400
3/25/81	3: 50:28	-15 10.221'	75 37.118'	3	12.167	17.353	2.335	290.30	16.243	300.820	212.00	4.000	3.900	159.500
3/25/81	4: 5:28	-15 10.221'	75 37.118'	3	12.034	17.421	19.072	377.08	16.486	123.760	212.00	4.000	15.200	145.100
3/25/81	4: 35:28	-15 5.351'	75 42.005'	3	11.921	17.307	19.525	383.77	16.517	119.890	402.00	4.000	15.700	150.700
3/25/81	4: 20:28	-15 5.351'	75 42.005'	3	11.921	17.307	19.525	383.77	16.517	119.890	402.00	4.000	15.700	150.700
3/25/81	4: 50:28	-15 5.484'	75 41.697'	3	11.559	17.259	18.814	378.52	16.439	120.090	402.00	2.500	16.300	141.300
3/25/81	5: 5:28	-15 5.484'	75 41.697'	3	11.637	17.060	16.976	376.85	16.376	120.290	430.00	2.400	14.800	140.400
3/25/81	5: 20:28	-15 5.484'	75 41.697'	3	11.637	17.060	15.949	373.46	16.257	123.100	430.00	2.400	13.700	139.200
3/25/81	5: 35:28	-15 5.484'	75 41.697'	3	11.562	17.016	16.206	375.50	16.179	120.510	430.00	2.400	14.000	137.500
3/25/81	5: 50:28	-15 5.484'	75 41.697'	3	11.776	17.036	18.843	357.69	16.124	159.740	430.00	2.100	16.700	148.600
3/25/81	5: 50:28	-15 5.484'	75 41.697'	3	11.695	17.053	20.655	359.47	16.054	149.940	430.00	2.200	18.400	149.600

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEN	POIN	AIRTEMP	APPRNSP	APPRADR	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
3/25/81	6: 5:28	-15 5.484'	75 41.697'	3	11.788	17.060	21.268	354.82	15.992	151.360	430.00	2.100	19.000	145.200	
3/25/81	6:20:28	-15 5.484'	75 41.697'	3	12.202	17.288	22.821	350.54	15.969	149.470	430.00	2.200	20.700	139.500	
3/25/81	6:35:28	-15 5.484'	75 41.697'	3	12.220	17.417	23.418	349.66	15.842	149.820	430.00	3.900	19.600	137.400	
3/25/81	6:50:28	-15 9.091'	75 36.538'	3	11.999	17.419	22.273	343.85	15.675	158.480	618.00	3.900	18.600	140.900	
3/25/81	7: 5:28	-15 9.091'	75 36.538'	3	12.434	17.712	21.820	341.89	15.641	166.290	618.00	3.900	18.300	145.100	
3/25/81	7:20:28	-15 9.091'	75 36.538'	3	13.106	17.801	22.568	355.02	15.814	150.110	618.00	3.900	18.500	144.700	
3/25/81	7:35:28	-15 9.091'	75 36.538'	3	13.111	18.026	22.936	353.86	16.185	149.080	618.00	3.900	19.100	142.000	
3/25/81	7:50:28	-15 12.595'	75 35.395'	3	13.113	17.960	22.489	353.71	16.378	148.150	722.00	3.800	18.500	139.500	
3/25/81	8: 5:28	-15 12.595'	75 35.395'	3	13.059	17.960	21.091	715.64	16.503	149.590	722.00	3.800	17.200	143.500	
3/25/81	8:20:28	-15 12.595'	75 35.395'	3	13.111	18.080	21.358	711.70	16.707	151.400	722.00	3.900	17.900	140.000	
3/25/81	8:35:28	-15 12.595'	75 35.395'	3	13.333	18.140	21.526	710.16	16.828	151.670	722.00	3.900	17.900	140.000	
3/25/81	8:50:28	-15 12.595'	75 35.395'	3	13.555	18.336	23.058	710.92	17.192	149.960	722.00	3.900	19.000	138.800	
3/25/81	9: 5:28	-15 12.595'	75 35.395'	3	13.695	18.458	21.453	712.52	17.366	150.550	722.00	3.800	17.600	141.700	
3/25/81	9:20:28	-15 12.595'	75 35.395'	3	13.777	18.673	20.461	713.08	17.430	149.690	722.00	3.900	16.700	140.900	
3/25/81	9:35:28	-15 18.357'	75 33.114'	3	14.282	18.841	20.189	714.61	17.497	149.970	908.00	3.900	16.300	143.000	
3/25/81	9:50:30	-15 18.357'	75 33.114'	3	14.444	19.160	20.784	714.15	18.196	150.560	908.00	3.900	17.000	143.200	
3/25/81	10: 5:30	-15 18.357'	75 33.114'	3	14.854	19.162	20.784	714.15	18.196	150.560	908.00	3.900	17.000	143.200	
3/25/81	10:20:30	-15 18.357'	75 33.114'	3	14.888	19.376	20.423	713.67	18.603	149.240	908.00	3.900	16.500	142.000	
3/25/81	10:35:30	-15 22.227'	75 31.368'	3	14.991	19.400	18.741	711.68	18.923	150.800	1016.00	3.900	14.900	140.300	
3/25/81	10:50:30	-15 22.227'	75 31.368'	3	15.254	19.580	19.180	697.64	19.105	171.260	1016.00	3.900	16.200	151.700	
3/25/81	11: 5:30	-15 22.227'	75 31.368'	3	14.083	18.930	839	97.90	19.043	347.850	1016.00	3.900	4.100	154.700	
3/25/81	11:20:30	-15 22.227'	75 31.368'	3	13.385	18.345	979	88.09	18.105	347.210	1016.00	3.900	4.000	151.200	
3/25/81	11:35:30	-15 22.227'	75 31.368'	3	12.890	17.961	2.007	98.47	17.412	347.120	1016.00	3.900	4.500	144.400	
3/25/81	11:50:30	-15 22.227'	75 31.368'	3	12.890	17.961	2.007	98.47	17.412	347.120	1016.00	3.900	4.100	152.400	
3/25/81	12: 5:30	-15 22.227'	75 31.368'	3	12.890	17.961	2.007	98.47	17.412	347.120	1016.00	3.900	4.100	152.400	
3/25/81	12:20:30	-15 22.227'	75 31.368'	3	12.428	17.487	2.715	112.50	15.803	351.460	1016.00	3.800	5.400	143.600	
3/25/81	12:35:30	-15 22.227'	75 31.368'	3	12.624	17.413	7.559	130.20	15.525	355.480	1016.00	9.200	15.200	153.800	
3/25/81	12:50:30	-15 10.734'	75 34.364'	3	12.154	17.654	9.226	257.19	15.756	264.350	1202.00	9.200	16.400	115.800	
3/25/81	13: 5:30	-15 10.734'	75 34.364'	3	11.697	17.957	7.980	276.17	15.803	254.070	1202.00	9.100	11.600	109.400	
3/25/81	13:20:30	-15 10.734'	75 34.364'	3	11.640	17.960	8.205	276.17	15.831	254.070	1202.00	9.200	11.100	120.100	
3/25/81	13:35:30	-15 5.860'	75 34.641'	2	11.566	18.026	7.112	292.18	15.852	255.460	1258.00	3.300	6.700	184.400	
3/25/81	13:50:30	-15 5.860'	75 34.641'	2	11.294	17.969	4.839	175.22	15.857	95.965	1258.00	0.000	4.900	266.200	
3/25/81	13:50:30	-15 5.860'	75 34.641'	2	11.940	17.918	4.873	128.95	15.811	68.228	1258.00	2.800	6.900	216.800	

C ARRIVED AT STATION 5 ZODIAKS AND BIMS OVER THE SIDES

3/25/81	14: 5:30	-15 5.860'	75 34.641'	2	11.778	17.780	6.293	127.33	15.819	65.616	1258.00	2.800	7.900	208.300	
3/25/81	14:20:30	-15 4.725'	75 34.135'	3	11.781	17.960	4.667	121.71	15.878	65.011	1358.00	2.900	6.600	207.500	
3/25/81	14:35:30	-15 4.725'	75 34.135'	3	11.592	17.951	6.028	129.26	15.918	74.316	1358.00	2.900	8.300	218.400	
3/25/81	14:50:30	-15 4.725'	75 34.135'	3	12.198	18.132	3.853	128.68	15.942	67.563	1358.00	2.900	6.300	216.000	
3/25/81	15: 5:30	-15 4.004'	75 34.383'	3	11.775	18.138	4.041	134.67	15.954	76.226	1442.00	4.400	4.600	213.300	
3/25/81	15:20:30	-15 4.004'	75 34.383'	3	11.585	18.142	4.675	127.27	15.954	68.334	1442.00	4.400	5.100	200.200	
3/25/81	15:35:30	-15 4.004'	75 34.383'	3	11.936	19.216	25.983	346.62	15.974	180.600	1442.00	1.300	24.600	166.400	
3/25/81	15:50:30	-15 4.004'	75 34.383'	3	12.886	18.918	8.032	179.57	16.012	290.530	1442.00	7.200	15.000	109.600	
3/25/81	16: 5:30	-15 4.618'	75 34.356'	4	11.995	18.902	7.295	242.05	16.063	289.590	1542.00	7.200	12.000	140.500	
3/25/81	16:20:30	-15 4.618'	75 34.356'	4	11.990	19.395	24.437	335.78	16.164	200.160	1542.00	7.300	17.800	166.300	
3/25/81	16:35:30	-15 2.639'	75 36.679'	3	12.113	19.447	14.772	298.55	16.223	240.480	1612.00	7.300	12.900	149.500	
3/25/81	16:50:30	-15 2.639'	75 36.679'	3	11.775	19.192	6.970	291.65	16.374	259.270	1612.00	7.300	8.200	133.000	
3/25/81	17: 5:30	-15 2.639'	75 36.679'	3	11.919	19.154	17.141	314.22	16.439	231.510	1612.00	7.200	12.800	147.800	
3/25/81	17:20:30	-15 2.639'	75 36.679'	3	11.777	19.425	21.054	393.99	16.357	111.940	1612.00	7.200	16.300	159.400	
3/25/81	17:35:30	-15 2.639'	75 36.679'	3	11.477	18.681	1.681	307.32	16.333	95.167	1612.00	7.300	6.800	285.700	
3/25/81	17:50:30	-15 2.639'	75 36.679'	3	12.030	18.322	5.665	127.97	16.269	71.237	1612.00	1.600	6.400	209.200	
3/25/81	18: 5:30	-15 2.639'	75 36.679'	3	12.080	18.314	4.674	125.94	16.362	76.914	1612.00	1.700	5.500	217.300	
3/25/81	18:20:30	-15 3.905'	75 35.646'	3	11.809	17.969	2.710	122.35	16.380	80.205	1800.00	1.600	3.800	222.300	
3/25/81	18:35:30	-15 3.905'	75 35.646'	3	11.991	18.073	3.774	126.58	16.368	77.699	1800.00	1.600	4.400	222.000	
3/25/81	18:50:30	-15 3.905'	75 35.646'	3	11.548	17.960	2.248	121.86	16.446	87.235	1800.00	1.700	3.400	233.000	
3/25/81	19: 5:30	-15 3.905'	75 35.646'	3	11.576	17.796	3.921	124.67	16.490	80.937	1800.00	1.600	5.000	220.700	
3/25/81	19:20:30	-15 3.905'	75 35.646'	3	11.944	17.935	4.162	123.03	16.485	76.682	1800.00	1.700	4.900	216.700	
3/25/81	19:35:30	-15 2.957'	75 35.254'	3	12.853	18.313	4.930	131.80	16.474	76.497	1908.00	1.600	5.800	218.500	
3/25/81	19:50:30	-15 2.957'	75 35.254'	3	12.311	17.961	3.300	125.41	16.417	76.399	1908.00	1.600	4.800	221.600	
3/25/81	20: 5:31	-15 2.957'	75 35.254'	3	12.215	17.960	4.049	123.21	16.390	80.727	1908.00	1.700	5.400	218.600	

TRWDSPD

ZULUFIY

SEATEMP

GYRONED

MANLSPD

TRWDSPD

TRWDSPD

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DENPOIN	AIRTEMP	APPRWSP	APPRNDR	SEATEMP	GYRONED	ZULUFIY	MANLSPD	TRWDSPD
3/25/81	20:31	-15 2.957'	75 35.254'	3	12.082	17.780	4.924	126.43	16.408	78.549	1908.00	1.700	6.200 215.400
3/25/81	20:35:31	-15 2.957'	75 35.254'	3	12.082	17.900	3.702	121.23	16.534	75.121	1908.00	1.600	4.700 214.500
3/25/81	20:50:31	-15 2.957'	75 35.254'	3	13.104	17.723	11.752	139.40	16.520	12.084	1908.00	1.600	12.800 156.400
3/25/81	21: 5:31	-15 2.957'	75 35.254'	3	13.773	17.825	17.201	140.09	16.147	12.508	1908.00	1.700	18.400 156.100
3/25/81	21:20:31	-15 1.321'	75 33.845'	4	13.918	18.131	20.531	142.78	16.004	13.770	2050.00	1.600	21.700 158.800
3/25/81	21:35:31	-15 1.321'	75 33.845'	4	12.831	18.493	17.581	306.73	16.237	267.710	2050.00	1.600	17.500 210.000
3/25/81	21:50:31	-15 1.321'	75 33.845'	4	13.291	18.802	9.000	307.04	16.650	286.030	2050.00	1.700	7.600 220.800
3/25/81	22: 5:31	-15 1.321'	75 33.845'	4	13.333	18.863	7.221	240.26	16.842	283.290	2050.00	1.700	8.100 153.000
3/25/81	22:20:31	-15 1.321'	75 33.845'	4	13.302	18.680	1.652	278.50	17.092	242.150	2050.00	1.700	2.200 113.200
3/25/81	22:35:31	-14 58.194'	75 39.797'	4	13.134	18.835	2.029	412.04	17.221	162.290	2202.00	1.700	1.600 260.900
3/25/81	22:50:31	-14 58.194'	75 39.797'	4	12.712	18.375	1.361	410.10	16.765	203.150	2202.00	1.700	1.400 345.500
3/25/81	23: 5:31	-14 59.669'	75 39.649'	2	12.824	18.473	4.298	384.93	16.725	208.520	2242.00	1.600	2.800 254.100
3/25/81	23:35:33	-14 59.669'	75 39.649'	2	13.297	18.614	7.753	352.55	16.869	210.300	2242.00	1.600	6.100 200.900
3/25/81	23:50:33	-14 59.669'	75 39.649'	2	13.116	18.632	19.426	351.87	16.825	180.290	2242.00	5.700	13.900 169.400
3/25/81	0: 5:34	-14 59.669'	75 39.649'	2	13.110	18.679	25.593	345.22	16.894	180.400	2242.00	5.600	20.600 161.700
3/25/81	0:20:36	-15 2.460'	75 40.928'	3	13.193	18.860	27.018	340.37	17.016	181.490	2242.00	5.600	22.300 156.300
3/25/81	0:35:36	-15 2.460'	75 40.928'	3	13.162	18.835	28.036	342.71	17.180	180.460	2346.00	5.700	22.500 159.200
3/26/81	0:50:37	-15 2.460'	75 40.928'	3	13.473	18.809	29.007	345.64	17.260	179.950	2346.00	5.700	23.900 162.200
3/26/81	1: 5:39	-15 2.460'	75 40.928'	3	13.595	18.681	27.401	407.06	17.272	180.690	2346.00	5.600	22.100 162.500
3/26/81	1:20:39	-15 2.460'	75 40.928'	3	12.449	18.329	26.331	392.90	17.208	102.770	2346.00	5.600	21.900 143.000
3/26/81	1:35:39	-15 2.460'	75 40.928'	3	12.008	18.140	28.375	389.57	16.610	100.080	2346.00	5.700	23.500 135.500
3/26/81	1:50:39	-15 2.460'	75 40.928'	3	11.787	17.960	24.206	392.98	16.087	98.708	2346.00	4.000	20.900 138.300
3/26/81	2: 5:39	-15 2.460'	75 40.928'	3	11.609	17.781	23.248	394.95	15.914	99.174	2346.00	4.000	20.600 139.100
3/26/81	2:20:39	-15 9.781'	75 36.858'	3	11.989	17.825	26.113	377.08	15.849	121.610	158.00	4.000	22.200 141.200
3/26/81	2:35:39	-15 9.781'	75 36.858'	3	12.412	18.001	24.912	361.78	15.936	146.760	158.00	2.000	22.800 146.700
3/26/81	2:50:39	-15 9.781'	75 36.858'	3	11.873	17.958	25.034	383.10	16.029	118.480	158.00	2.000	23.500 144.800
3/26/81	3: 5:39	-15 9.781'	75 36.858'	3	11.856	17.960	25.492	389.27	16.040	118.520	158.00	1.900	23.400 150.000
3/26/81	3:20:39	-15 10.909'	75 35.355'	3	11.776	17.960	26.040	388.46	15.936	119.120	310.00	2.300	24.000 147.100
3/26/81	3:35:39	-15 10.909'	75 35.355'	3	11.559	18.080	26.414	387.41	15.894	117.680	310.00	2.300	24.100 148.300
3/26/81	4: 5:39	-15 11.370'	75 34.932'	3	11.777	18.074	26.761	387.04	15.816	118.590	342.00	2.300	24.700 148.700
3/26/81	4:20:39	-15 11.370'	75 34.932'	3	11.976	17.968	25.431	387.92	15.826	119.130	342.00	2.400	23.100 150.300
3/26/81	4:35:39	-15 11.370'	75 34.932'	3	11.917	17.960	24.903	382.90	15.790	120.180	342.00	2.300	23.300 145.500
3/26/81	4:50:39	-15 11.370'	75 34.932'	3	11.999	17.960	23.974	384.03	15.847	120.760	342.00	2.300	21.900 147.400
3/26/81	5: 5:39	-15 11.370'	75 34.932'	3	12.219	17.960	23.504	383.16	16.162	119.410	342.00	2.300	21.300 145.000
3/26/81	5:20:39	-15 11.370'	75 34.932'	3	12.061	18.002	23.007	383.22	16.327	120.630	342.00	2.300	20.400 147.200
3/26/81	5:35:39	-15 12.544'	75 32.247'	3	12.019	17.960	22.654	384.61	16.407	119.750	524.00	2.300	20.100 147.100
3/26/81	5:50:39	-15 12.544'	75 32.247'	3	12.063	17.960	22.743	380.39	16.517	121.290	524.00	2.300	20.200 143.700
3/26/81	6: 5:39	-15 12.544'	75 32.247'	3	12.252	17.960	22.192	382.23	16.548	120.480	524.00	2.300	19.800 144.100
3/26/81	6:20:39	-15 12.544'	75 32.247'	3	12.160	17.960	23.337	385.35	16.544	119.300	524.00	2.300	21.200 145.900
3/26/81	6:35:39	-15 12.544'	75 32.247'	3	12.218	17.962	22.973	384.53	16.490	121.310	524.00	2.300	20.500 148.800
3/26/81	6:50:39	-15 12.544'	75 32.247'	3	12.000	18.134	22.578	382.71	16.488	119.940	524.00	2.300	20.500 145.200
3/26/81	7: 5:39	-15 12.544'	75 32.247'	3	12.070	18.140	22.357	383.34	16.465	120.030	524.00	2.300	20.200 146.000
3/26/81	7:20:39	-15 12.544'	75 32.247'	3	12.423	18.140	22.669	382.47	16.454	119.580	524.00	2.300	20.700 144.800
3/26/81	7:35:39	-15 12.544'	75 32.247'	3	12.027	18.140	22.092	383.30	16.483	120.010	524.00	2.300	19.600 147.100
3/26/81	7:50:39	-15 12.544'	75 32.247'	3	12.000	18.140	22.655	386.65	16.568	119.110	524.00	2.300	20.600 148.600
3/26/81	8: 5:39	-15 12.544'	75 32.247'	3	12.732	18.320	27.018	347.75	16.600	169.760	524.00	2.300	24.000 155.700
3/26/81	8:20:39	-15 12.544'	75 32.247'	3	13.107	18.613	27.083	344.35	16.685	170.110	818.00	2.300	24.400 153.400
3/26/81	8:35:39	-15 14.627'	75 29.171'	3	13.106	18.558	24.699	341.38	16.835	170.270	818.00	2.300	22.500 149.400
3/26/81	8:50:39	-15 14.627'	75 29.171'	3	13.554	18.902	22.956	673.53	17.154	170.950	818.00	4.000	21.900 147.300
3/26/81	9: 5:39	-15 14.627'	75 29.171'	3	13.100	18.835	25.842	341.04	16.956	170.050	818.00	4.000	21.900 147.300
3/26/81	9:20:39	-15 18.690'	75 28.979'	2	13.556	19.040	22.770	701.34	17.587	169.940	928.00	4.000	19.100 147.100
3/26/81	9:35:39	-15 18.690'	75 28.979'	2	13.995	19.220	21.294	701.63	18.113	169.560	928.00	4.000	17.100 146.900
3/26/81	10: 5:39	-15 18.690'	75 28.979'	2	14.198	19.400	22.276	696.95	18.262	169.960	928.00	4.000	18.800 142.800
3/26/81	10:20:39	-15 21.118'	75 29.161'	3	14.369	19.513	20.656	695.32	18.442	170.420	1008.00	4.000	17.300 140.400
3/26/81	10:35:39	-15 21.118'	75 29.161'	3	14.595	19.622	21.204	696.55	18.675	169.870	1008.00	4.300	16.600 140.600
3/26/81	10:50:37	-15 21.118'	75 29.161'	3	14.693	19.589	4.405	161.21	18.946	332.750	1008.00	11.100	15.800 153.000
3/26/81	11: 5:39	-15 21.118'	75 29.161'	3	14.693	19.589	4.405	161.21	18.946	332.750	1008.00	11.100	15.800 153.000

DATE	TIME	DEC MIN-LAT	DEC MIN-LNG	PX	DEWHUIN	AIRTEMP	APPROX	SEALEVEL	WINDSPEED	WINDDIRECTION
3/26/81	11:20:39	-15 21.118'	75 29.161'	3	13.781	19.108	1.749	122.91	18.669	348.970
3/26/81	11:35:39	-15 22.467'	75 29.119'	3	13.193	18.684	2.785	130.04	18.004	348.840
3/26/81	11:50:39	-15 22.467'	75 29.119'	3	12.447	18.141	4.626	128.71	17.143	349.190
3/26/81	12:05:39	-15 22.467'	75 29.119'	3	12.300	17.960	6.346	127.75	16.574	350.040
3/26/81	12:20:39	-15 22.467'	75 29.119'	3	12.447	18.140	6.914	132.61	16.056	35.359
3/26/81	12:35:39	-15 22.467'	75 29.119'	3	11.778	17.961	5.319	141.66	15.508	35.801
3/26/81	12:50:39	-15 22.467'	75 29.119'	3	10.971	17.454	3.156	167.22	15.018	35.494
3/26/81	13:05:39	-15 22.467'	75 29.119'	3	10.343	17.551	20.039	337.58	14.767	150.110
3/26/81	13:20:39	-15 3.866'	75 27.654'	9	10.743	17.649	5.950	129.46	14.683	66.897
3/26/81	13:35:41	-15 3.866'	75 27.654'	9	10.889	17.600	4.219	128.51	14.649	63.513
3/26/81	13:50:41	-15 3.866'	75 27.654'	9	10.728	17.779	4.038	124.88	14.664	67.905
3/26/81	14:05:41	-15 3.734'	75 27.605'	3	10.377	17.747	21.647	350.12	14.648	113.550
3/26/81	14:20:41	-15 3.734'	75 27.605'	3	6.013	17.166	20.223	315.63	14.674	237.470
3/26/81	14:35:41	-15 3.734'	75 27.605'	3	11.763	18.138	26.134	647.50	14.887	237.140
3/26/81	14:50:41	-15 3.734'	75 27.605'	3	11.695	18.139	3.015	275.45	15.157	308.490
3/26/81	15:05:41	-15 3.734'	75 27.605'	3	11.529	18.424	19.055	335.90	15.609	212.210
3/26/81	15:20:41	-15 3.734'	75 27.605'	3	12.251	18.098	6.476	117.74	15.746	67.874
3/26/81	15:35:41	-15 4.644'	75 35.409'	3	12.031	17.960	4.290	123.85	15.771	80.049
3/26/81	15:50:41	-15 4.644'	75 35.409'	3	12.210	17.960	4.489	123.44	15.758	82.751
3/26/81	16:05:41	-15 4.644'	75 35.409'	3	11.795	17.960	3.806	116.20	15.815	75.332
3/26/81	16:20:41	-15 4.644'	75 35.409'	3	11.567	17.822	3.222	170.27	15.848	58.916
3/26/81	16:35:41	-15 4.644'	75 35.409'	3	11.969	17.989	3.765	118.52	15.863	76.332
3/26/81	16:50:41	-15 3.461'	75 35.356'	3	11.764	17.932	4.032	117.68	15.861	85.307
3/26/81	17:05:41	-15 3.461'	75 35.356'	3	11.919	17.780	8.431	127.48	15.880	71.964
3/26/81	17:20:41	-15 2.961'	75 35.459'	3	12.404	17.957	7.294	132.41	15.825	75.904
3/26/81	17:35:41	-15 2.961'	75 35.459'	3	12.233	17.913	9.105	129.63	15.859	70.548
3/26/81	17:50:41	-15 2.961'	75 35.459'	3	11.873	17.913	32.341	351.32	15.781	183.300
3/26/81	18:05:41	-15 2.961'	75 35.459'	3	12.692	19.276	22.057	314.44	15.886	224.470
3/26/81	18:20:41	-15 2.961'	75 35.459'	3	12.888	19.409	9.627	298.04	15.914	256.870
3/26/81	18:35:41	-15 2.961'	75 35.459'	3	12.206	18.925	28.095	343.46	16.075	200.700
3/26/81	18:50:41	-15 2.961'	75 35.459'	3	13.110	19.571	6.118	135.17	16.221	64.982
3/26/81	19:05:41	-15 2.961'	75 35.459'	3	13.113	18.854	7.029	135.57	16.257	62.199
3/26/81	19:20:41	-15 2.961'	75 35.459'	3	12.970	18.686	7.711	120.82	16.246	62.139
3/26/81	19:35:41	-15 2.961'	75 35.459'	3	13.111	18.858	5.764	132.28	16.235	65.009
3/26/81	19:50:41	-15 2.961'	75 35.459'	3	13.100	18.680	11.228	306.80	16.176	242.580
3/26/81	20:05:41	-15 2.961'	75 35.459'	3	12.449	19.024	25.708	362.72	16.157	171.760
3/26/81	20:20:41	-15 3.048'	75 35.846'	3	12.395	19.266	8.273	125.45	16.125	60.442
3/26/81	20:35:41	-15 3.048'	75 35.846'	3	12.817	18.860	7.177	125.81	16.121	60.597
3/26/81	20:50:41	-15 3.048'	75 35.846'	3	12.744	18.842	4.640	118.32	16.081	62.737
3/26/81	21:05:41	-15 3.048'	75 35.846'	3	12.741	18.860	6.295	123.74	16.023	59.331
3/26/81	21:20:41	-15 3.048'	75 35.846'	3	12.694	18.860	35.321	342.11	15.948	156.570
3/26/81	21:35:41	-15 3.048'	75 35.846'	3	12.665	19.445	35.823	352.60	15.924	168.480
3/26/81	21:50:41	-15 3.048'	75 35.846'	3	12.665	19.445	6.581	136.00	15.903	73.263
3/26/81	22:05:41	-15 1.604'	75 35.939'	3	12.807	18.934	7.794	119.69	15.865	61.401
3/26/81	22:20:41	-15 1.604'	75 35.939'	3	12.646	18.496	6.194	128.83	15.851	67.383
3/26/81	22:35:41	-15 1.604'	75 35.939'	3	12.589	18.292	6.962	137.93	15.833	62.217
3/26/81	22:50:41	-15 1.604'	75 35.939'	3	12.657	18.164	4.484	136.21	15.810	68.150
3/26/81	23:05:41	-15 4.544'	75 34.994'	3	12.796	18.140	6.299	136.21	15.782	67.853
3/26/81	23:20:41	-15 4.544'	75 34.994'	3	12.447	18.140	28.794	377.67	15.692	132.940
3/26/81	23:35:41	-15 4.544'	75 34.994'	3	11.672	18.140	28.374	370.51	15.579	137.410
3/26/81	23:50:41	-15 4.544'	75 34.994'	3	11.750	18.139	30.419	373.93	15.417	135.350
3/27/81	0:05:43	-15 4.544'	75 34.994'	3	11.336	18.140	27.129	370.09	15.308	135.720
3/27/81	0:20:43	-15 4.544'	75 34.994'	3	11.329	18.319	27.711	370.97	15.223	135.520
3/27/81	0:35:43	-15 4.544'	75 34.994'	3	11.174	18.301				

C STARTED ATMOSPHERIC SAMPLING 22:00Z

3/27/81	1:06:49	-15 4.776'	75 33.865'	5	11.119	18.204	26.898	372.54	15.173	131.130	46.00	1.900	25.000	147.600
3/27/81	1:21:49	-15 4.776'	75 33.865'	5	11.333	18.140	26.444	373.09	15.147	133.970	46.00	1.900	24.200	147.400
3/27/81	1:36:51	-15 4.776'	75 33.865'	5	11.258	18.140	25.772	372.61	15.163	136.490	46.00	2.200	23.900	149.400

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APRNSP	APPRWR	SEATEMP	GYROHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/27/81	1:51:51	-15 4 776'	75 33 865'	5	11.605	18.475	34.869	352.39	15.279	167.820	46.00	2.200	32.500	160.700
3/27/81	2:06:52	-15 4 776'	75 33 865'	5	12.215	18.815	34.075	351.14	15.861	168.150	46.00	2.200	32.000	158.700
3/27/81	2:21:52	-15 4 776'	75 33 865'	5	12.307	18.705	26.404	374.59	16.457	132.210	46.00	2.200	24.800	145.100
3/27/81	2:36:53	-15 4 776'	75 33 865'	5	12.150	18.614	23.324	375.70	16.764	123.960	46.00	2.200	21.100	142.200
3/27/81	2:51:53	-15 11 914'	75 31 796'	3	12.361	18.679	24.916	371.58	16.871	123.800	220.00	2.100	22.900	126.300
3/27/81	3:06:53	-15 12 289'	75 30 907'	3	12.363	18.680	25.313	374.31	16.885	123.140	238.00	2.100	23.000	139.000
3/27/81	3:21:55	-15 12 289'	75 30 907'	3	12.331	18.638	22.182	371.49	16.966	123.950	238.00	2.200	21.100	136.200
3/27/81	3:36:57	-15 12 289'	75 30 907'	3	12.499	18.500	22.191	369.62	17.015	124.180	238.00	2.100	20.300	134.600
3/27/81	3:51:57	-15 12 289'	75 30 907'	3	12.444	18.500	22.202	375.65	17.037	124.720	238.00	2.100	20.000	140.300
3/27/81	4:06:57	-15 12 289'	75 30 907'	3	12.170	18.323	21.179	377.63	17.043	123.810	238.00	2.200	18.900	144.100
3/27/81	4:21:57	-15 13 307'	75 29 107'	4	12.222	18.320	20.759	373.14	17.073	123.810	408.00	2.200	18.800	135.100
3/27/81	4:36:57	-15 13 307'	75 29 107'	4	12.443	18.320	21.013	368.00	17.094	126.250	408.00	2.400	18.500	135.400
3/27/81	4:51:57	-15 13 670'	75 29 107'	3	12.437	18.500	22.666	370.70	17.145	127.110	432.00	2.400	20.600	140.200
3/27/81	5:06:57	-15 13 670'	75 29 107'	3	12.415	18.449	22.394	373.15	17.105	124.390	432.00	2.400	19.900	139.800
3/27/81	5:21:57	-15 13 670'	75 29 107'	3	12.444	18.484	23.767	368.85	17.219	127.490	432.00	2.500	20.100	136.800
3/27/81	5:36:57	-15 15 029'	75 25 891'	3	12.887	18.494	23.778	352.68	17.285	150.330	620.00	2.400	20.800	142.500
3/27/81	5:51:57	-15 15 029'	75 25 891'	3	12.884	18.637	24.367	349.36	17.315	155.060	620.00	2.400	22.200	143.300
3/27/81	6:06:57	-15 15 029'	75 25 891'	3	13.250	18.680	21.760	347.46	17.432	154.370	620.00	2.400	19.400	140.100
3/27/81	6:21:57	-15 17 728'	75 24 654'	4	13.473	18.809	22.139	346.80	17.920	155.420	728.00	3.800	18.500	138.800
3/27/81	6:36:57	-15 17 728'	75 24 654'	4	13.386	18.860	22.978	349.72	18.622	155.220	728.00	3.800	21.100	143.700
3/27/81	6:51:57	-15 17 728'	75 24 654'	4	13.547	19.040	25.169	342.50	18.732	155.450	728.00	3.800	21.900	140.200
3/27/81	7:06:57	-15 17 728'	75 24 654'	4	13.535	19.082	26.118	345.72	18.843	155.880	728.00	3.800	22.800	139.400
3/27/81	7:21:57	-15 17 728'	75 24 654'	4	13.415	19.040	25.895	342.07	18.858	155.220	728.00	3.800	22.200	135.000
3/27/81	7:36:57	-15 17 728'	75 24 654'	4	13.548	19.154	25.696	392.25	18.843	155.970	728.00	3.800	22.400	131.500
3/27/81	7:51:57	-15 17 728'	75 24 654'	4	13.414	19.040	25.895	342.07	18.858	155.220	728.00	3.800	22.800	139.400
3/27/81	8:06:57	-15 23 758'	75 22 402'	4	13.525	19.220	23.688	340.12	18.821	155.590	914.00	4.100	19.200	131.700
3/27/81	8:21:57	-15 23 758'	75 22 402'	4	13.555	19.043	22.567	698.45	19.052	154.950	914.00	4.100	18.200	126.400
3/27/81	8:36:57	-15 23 758'	75 22 402'	4	13.777	19.040	22.345	701.95	19.237	154.380	914.00	4.100	18.500	132.600
3/27/81	8:51:57	-15 23 758'	75 22 402'	4	13.345	19.219	21.388	339.12	19.240	155.450	914.00	4.000	17.800	129.300
3/27/81	9:06:57	-15 27 769'	75 21 330'	2	13.803	19.041	2.808	123.35	19.254	329.910	1022.00	11.500	13.900	126.800
3/27/81	9:21:57	-15 27 769'	75 21 330'	2	13.758	18.927	3.342	119.66	19.209	329.140	1022.00	11.500	13.500	136.100
3/27/81	9:36:57	-15 27 769'	75 21 330'	2	13.356	18.860	3.442	121.74	18.960	329.890	1022.00	11.500	13.300	138.100
3/27/81	9:51:57	-15 27 769'	75 21 330'	2	13.995	19.040	4.440	128.64	19.023	330.220	1022.00	11.500	15.400	134.800
3/27/81	10:06:57	-15 27 769'	75 21 330'	2	14.664	19.236	7.099	133.84	18.756	329.450	1022.00	11.500	17.200	132.400
3/27/81	10:21:57	-15 27 769'	75 21 330'	2	14.655	19.099	7.099	141.00	17.972	330.190	1022.00	11.500	17.500	135.000
3/27/81	10:36:57	-15 27 769'	75 21 330'	2	13.996	19.040	6.878	132.73	17.293	341.580	1022.00	11.500	17.200	144.200
3/27/81	10:51:57	-15 13 783'	75 30 770'	3	13.112	18.860	7.015	128.29	16.816	342.240	1210.00	11.500	16.000	143.900
3/27/81	11:06:57	-15 13 783'	75 30 770'	3	12.608	19.039	8.390	294.97	16.353	251.600	1210.00	11.500	10.900	115.400
3/27/81	11:21:57	-15 13 783'	75 30 770'	3	12.030	18.844	8.954	303.04	16.157	253.820	1210.00	11.500	9.400	105.400
3/27/81	11:36:57	-15 13 783'	75 30 770'	3	12.052	18.680	7.037	314.09	16.085	254.430	1210.00	11.500	8.500	114.900
3/27/81	11:51:57	-15 13 783'	75 30 770'	3	12.109	18.793	9.794	186.20	16.072	328.020	1210.00	11.500	21.200	153.500

C ON STATION 5 ZODIAKS AND BINS OVER THE SIDES SEDIMENT TRAP PICKUP

3/27/81	13:51:58	-15 13 783'	75 30 770'	3	12.907	18.208	13.574	145.83	15.708	15.088	1210.00	11.500	23.900	177.200
3/27/81	14:06:58	-15 13 783'	75 30 770'	3	10.698	18.319	17.755	380.25	15.318	121.170	1210.00	11.500	8.000	163.100
3/27/81	14:21:58	-15 13 783'	75 30 770'	3	12.518	18.314	14.304	188.44	15.327	165.050	1210.00	11.500	26.500	342.000
3/27/81	14:36:58	-15 6 567'	75 36 426'	3	12.596	18.328	14.098	133.25	15.369	57.163	1406.00	11.500	23.000	211.500
3/27/81	14:51:58	-15 6 567'	75 36 426'	3	13.057	18.519	20.578	141.81	15.345	25.643	1406.00	11.500	30.700	180.600
3/27/81	15:06:58	-15 6 567'	75 36 426'	3	11.553	18.678	20.416	185.45	15.324	338.860	1406.00	11.500	31.600	163.200
3/27/81	15:21:58	-15 6 567'	75 36 426'	3	12.598	18.321	8.670	123.96	15.273	70.071	1406.00	11.500	18.400	225.600
3/27/81	15:36:58	-15 6 567'	75 36 426'	3	12.444	18.140	4.530	125.04	15.246	82.306	1406.00	11.500	14.500	248.800
3/27/81	15:51:58	-15 6 567'	75 36 426'	3	11.557	18.670	9.692	305.23	15.227	257.320	1406.00	11.500	10.000	130.700

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LONG	FIX	DEWPOINT	AIRTEMP	APPRNSP	APPRWDR	SEATEMP	CYRROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDTR
3/27/81	16: 7:11	-15 6.567'	75 36.426'	3	11.967	19.398	29.065	330.27	15.263	221.780	1406.00	11.500	19.800	175.700
3/27/81	16:22:11	-15 3.908'	75 32.016'	3	12.473	19.750	33.667	350.51	15.338	192.180	1552.00	8.200	25.600	179.300
3/27/81	16:37:11	-15 3.908'	75 32.016'	3	13.122	20.660	26.679	363.22	15.840	167.780	1552.00	8.200	19.200	172.100
3/27/81	16:52:11	-15 5.919'	75 43.183'	3	13.111	19.223	6.083	130.49	16.356	79.881	1616.00	8.200	12.600	239.900
3/27/81	17: 7:11	-15 5.919'	75 43.183'	3	13.208	19.333	22.635	171.41	16.466	268.800	1616.00	8.200	30.500	80.600
3/27/81	17:22:11	-15 5.919'	75 43.183'	3	13.634	19.608	14.521	137.47	16.434	71.954	1616.00	8.200	21.100	226.000
3/27/81	17:37:11	-15 5.919'	75 43.183'	3	13.092	19.402	6.403	132.30	16.383	81.885	1616.00	8.200	13.200	243.300
3/27/81	17:52:11	-15 5.919'	75 43.183'	3	12.574	19.863	17.957	207.43	16.272	303.890	1616.00	8.200	25.100	143.000
3/27/81	18: 7:11	-15 5.919'	75 43.183'	3	12.143	19.589	6.811	127.51	16.114	79.684	1616.00	8.200	13.800	233.500
3/27/81	18:22:11	-15 5.919'	75 43.183'	3	13.080	19.693	13.298	181.65	16.213	174.830	1616.00	8.200	21.700	352.300
3/27/81	18:37:11	-15 5.919'	75 43.183'	3	12.880	19.784	10.223	134.06	16.057	80.504	1616.00	8.200	17.800	234.200
3/27/81	18:52:11	-15 5.919'	75 43.183'	3	12.887	19.583	10.225	133.36	16.095	74.785	1616.00	8.200	16.800	227.400
3/27/81	19: 7:11	-15 5.919'	75 43.183'	3	12.997	19.583	7.953	127.62	16.090	75.707	1616.00	8.200	14.800	229.200
3/27/81	19:22:11	-15 5.919'	75 43.183'	3	12.071	19.761	14.289	298.49	16.079	260.120	1616.00	8.200	12.100	162.900
3/27/81	19:37:11	-15 5.919'	75 43.183'	3	12.880	19.467	4.280	128.29	16.050	80.654	1616.00	8.200	11.200	242.200
3/27/81	19:52:11	-15 5.919'	75 43.183'	3	13.062	19.409	12.453	136.15	16.065	66.808	1616.00	8.200	17.600	338.300
3/27/81	20: 7:11	-15 5.919'	75 43.183'	3	12.073	19.447	12.407	241.52	16.105	130.220	1616.00	8.200	13.100	185.400
3/27/81	20:22:11	-15 5.919'	75 43.183'	3	12.300	19.580	14.116	296.76	16.132	254.440	1616.00	1.600	12.500	188.900
3/27/81	20:37:11	-15 5.919'	75 43.183'	3	12.221	19.564	13.500	297.75	16.227	254.510	1616.00	1.600	8.300	202.800
3/27/81	20:52:11	-15 5.919'	75 43.183'	3	12.271	19.406	9.056	306.08	16.311	263.460	1616.00	1.600	4.600	239.500
3/27/81	21: 7:11	-15 5.919'	75 43.183'	3	11.779	19.243	2.829	187.99	16.374	48.612	1616.00	500	8.600	353.400
3/27/81	21:22:11	-15 1.613'	75 40.256'	4	13.335	18.876	10.183	128.81	15.806	66.206	2100.00	600	10.300	197.100
3/27/81	21:37:11	-15 1.613'	75 40.256'	4	12.465	19.042	8.595	189.18	15.961	174.240	2100.00	500	7.100	197.300
3/27/81	21:52:11	-15 1.613'	75 40.256'	4	12.465	19.118	7.266	287.80	15.816	274.000	2100.00	500	7.300	292.500
3/27/81	22: 7:11	-15 1.613'	75 40.256'	4	11.350	19.153	6.842	162.97	15.835	107.190	2100.00	500	7.300	286.700
3/27/81	22:22:11	-15 1.613'	75 40.256'	4	10.808	19.063	6.501	190.27	15.604	102.230	2100.00	500	7.300	292.500
3/27/81	22:37:11	-14 59.614'	75 37.257'	4	10.667	18.729	36.584	387.82	15.244	117.710	2210.00	500	36.000	145.900
3/27/81	22:52:11	-14 59.614'	75 37.257'	4	10.165	18.295	38.782	383.72	14.912	117.160	2210.00	500	38.200	140.900
3/27/81	23: 7:11	-14 59.614'	75 37.257'	4	10.243	18.500	42.542	373.69	14.914	132.420	2210.00	600	41.600	146.700
3/27/81	23:22:11	-14 59.614'	75 37.257'	4	10.302	18.666	30.919	180.33	14.949	325.300	2210.00	500	30.800	147.700
3/27/81	23:37:11	-14 59.614'	75 37.257'	4	10.677	18.320	9.235	258.33	14.892	267.650	2210.00	5.600	11.700	137.300
3/27/81	23:52:11	-14 59.614'	75 37.257'	4	12.067	18.271	31.783	146.93	15.022	354.260	2210.00	5.500	36.300	145.900
3/28/81	0: 7:11	-15 3.097'	75 29.810'	3	10.445	18.295	18.706	221.69	14.961	302.350	2354.00	5.600	23.600	149.000
3/28/81	0:22:11	-15 3.097'	75 29.810'	3	10.422	18.384	19.011	226.14	14.956	298.330	2354.00	5.600	23.200	154.100
3/28/81	0:37:11	-15 3.097'	75 29.810'	3	10.444	18.320	17.495	227.90	14.929	300.010	2354.00	5.600	21.300	156.300
3/28/81	1: 7:11	-15 3.097'	75 29.810'	3	10.444	18.270	21.005	268.83	14.952	251.420	2354.00	5.600	19.800	161.600
3/28/81	1:22:11	-15 3.097'	75 29.810'	3	10.820	18.270	26.460	307.78	15.012	227.720	2354.00	2.200	23.500	149.800
3/28/81	1:37:11	-15 3.097'	75 29.810'	3	10.414	18.320	21.783	212.99	14.958	297.230	2354.00	2.200	23.100	169.800
3/28/81	1:52:11	-14 59.873'	75 34.831'	4	10.448	18.345	17.934	216.04	14.939	297.960	126.00	2.200	19.500	150.100
3/28/81	2: 7:11	-14 59.873'	75 34.831'	4	10.507	18.345	21.301	211.98	14.952	278.940	126.00	2.100	20.300	148.800
3/28/81	2:22:11	-14 59.873'	75 34.831'	4	10.458	18.140	24.153	306.78	15.052	232.580	126.00	4.500	21.600	170.800
3/28/81	2:37:11	-14 59.873'	75 34.831'	4	10.518	18.132	23.858	307.21	15.232	233.070	126.00	7.400	19.800	163.500
3/28/81	2:52:11	-14 59.873'	75 34.831'	4	10.847	18.156	15.941	430.55	15.522	100.240	126.00	7.300	14.700	194.100
3/28/81	3: 7:11	-14 59.873'	75 34.831'	4	11.258	18.132	4.657	132.23	15.594	59.065	126.00	7.300	11.500	224.600
3/28/81	3:22:11	-14 59.873'	75 34.831'	4	11.385	18.140	5.488	140.13	15.640	55.519	126.00	7.400	12.300	217.900
3/28/81	3:37:11	-14 59.595'	75 39.845'	3	11.334	17.957	5.452	124.22	15.642	60.341	312.00	7.300	10.600	218.700
3/28/81	3:52:11	-14 59.595'	75 39.845'	3	11.574	18.140	7.721	131.78	15.640	52.617	312.00	7.400	13.700	206.400
3/28/81	4: 7:11	-14 58.988'	75 40.590'	3	11.303	18.255	27.796	677.08	15.639	183.950	340.00	7.400	22.900	131.400
3/28/81	4:22:11	-14 58.988'	75 40.590'	3	11.555	18.327	27.386	688.03	15.622	199.750	340.00	3.400	24.500	163.600
3/28/81	4:37:11	-14 58.988'	75 40.590'	3	11.781	18.327	27.091	687.06	15.602	200.570	340.00	3.400	24.200	162.800
3/28/81	4:52:11	-14 58.988'	75 40.590'	3	11.630	18.278	27.582	682.70	15.836	200.150	340.00	3.400	24.700	160.200
3/28/81	5: 7:11	-14 58.988'	75 40.590'	3	11.348	18.320	29.638	692.17	16.005	177.820	340.00	3.500	26.300	147.000
3/28/81	5:22:11	-14 58.988'	75 40.590'	3	11.544	18.260	30.766	691.37	15.967	181.280	340.00	3.500	28.000	148.800
3/28/81	5:37:11	-15 1.432'	75 42.433'	0	11.341	17.985	29.224	693.54	15.905	180.350	508.00	3.500	26.400	149.200
3/28/81	5:52:11	-15 2.331'	75 42.712'	3	11.262	17.960	25.570	691.73	15.723	180.810	526.00	3.400	22.400	143.400
3/28/81	6: 7:11	-15 2.331'	75 42.712'	3	11.344	18.004	24.893	695.78	15.634	179.400	526.00	3.400	21.800	151.500
3/28/81	6:22:11	-15 2.331'	75 42.712'	3	11.766	18.076	23.667	696.76	15.787	179.060	526.00	3.400	20.900	152.300
3/28/81	6:37:11	-15 2.331'	75 42.712'	3	11.972	18.139	23.262	694.97	16.093	179.940	526.00	3.400	20.200	150.100
3/28/81	6:52:13	-15 2.331'	75 42.712'	3	12.362	18.380	23.621	695.45	16.338	179.710	526.00	3.800	20.100	151.200

DATE TIME DEG, MIN-LAT DEG, MIN-LNG FIX DEMPOIN AIRTEMP APPRWSP APPROR SEATEMP GYROHED ZULUFIX MANLSPD TRWDSPD TRWDJDR

3/28/81	7: 7: 13	-15	2. 331'	75 42. 712'	3	12. 869	18. 629	24. 193	691. 39	16. 599	179. 620	526. 00	3. 800	21. 200	146. 400
3/28/81	7: 22: 13	-15	2. 331'	75 42. 712'	3	13. 115	18. 664	25. 050	692. 40	17. 027	179. 420	526. 00	3. 900	21. 600	146. 600
3/28/81	7: 37: 13	-15	2. 331'	75 42. 712'	3	13. 109	18. 567	24. 512	690. 74	17. 286	178. 850	526. 00	3. 800	21. 400	144. 000
3/28/81	7: 52: 13	-15	2. 331'	75 42. 712'	3	13. 291	18. 636	22. 953	690. 21	17. 836	177. 850	526. 00	3. 800	19. 500	142. 700
3/28/81	8: 7: 13	-15	2. 331'	75 42. 712'	3	13. 529	18. 680	23. 134	689. 45	17. 594	179. 330	526. 00	3. 900	19. 600	143. 300
3/28/81	8: 22: 13	-15	2. 331'	75 42. 712'	3	13. 776	18. 696	22. 803	688. 97	17. 789	179. 450	526. 00	3. 800	19. 500	142. 400
3/28/81	8: 37: 13	-15	2. 331'	75 42. 712'	3	13. 778	19. 040	22. 526	690. 63	17. 920	179. 160	526. 00	3. 800	19. 300	143. 600
3/28/81	8: 52: 13	-15	13. 263'	75 46. 732'	4	14. 220	19. 375	22. 372	692. 29	18. 111	180. 190	824. 00	3. 400	19. 400	147. 700
3/28/81	9: 7: 13	-15	13. 263'	75 46. 732'	4	14. 211	19. 759	26. 210	692. 23	18. 316	180. 850	824. 00	3. 400	23. 200	149. 000
3/28/81	9: 22: 13	-15	13. 263'	75 46. 732'	4	14. 222	19. 873	23. 256	690. 45	18. 430	180. 100	824. 00	3. 400	20. 600	144. 800
3/28/81	9: 37: 13	-15	13. 263'	75 46. 732'	4	14. 232	19. 922	22. 359	688. 49	18. 446	179. 280	824. 00	3. 400	19. 600	144. 400
3/28/81	9: 52: 13	-15	13. 263'	75 46. 732'	4	14. 391	20. 120	21. 918	687. 60	18. 788	178. 780	824. 00	2. 900	19. 600	141. 900
3/28/81	10: 7: 13	-15	17. 331'	75 47. 883'	2	15. 028	20. 300	22. 903	689. 78	19. 159	179. 560	936. 00	2. 900	20. 100	143. 800
3/28/81	10: 22: 13	-15	17. 331'	75 47. 883'	2	14. 898	20. 480	25. 019	690. 66	19. 290	179. 180	936. 00	2. 900	22. 200	144. 800
3/28/81	10: 37: 13	-15	17. 331'	75 47. 883'	2	15. 080	20. 840	26. 592	689. 47	19. 404	180. 000	936. 00	2. 900	24. 000	146. 700
3/28/81	10: 52: 13	-15	17. 331'	75 47. 883'	2	14. 945	21. 020	29. 822	689. 17	19. 770	180. 000	936. 00	3. 200	26. 900	146. 000
3/28/81	11: 7: 13	-15	17. 331'	75 47. 883'	2	15. 472	21. 364	28. 054	693. 32	20. 448	177. 910	936. 00	3. 200	25. 300	147. 200
3/28/81	11: 22: 13	-15	17. 331'	75 47. 883'	2	14. 890	21. 401	29. 253	692. 19	20. 896	179. 610	936. 00	3. 200	26. 600	148. 400
3/28/81	11: 37: 13	-15	17. 331'	75 47. 883'	2	15. 111	21. 623	30. 151	690. 55	21. 512	180. 390	936. 00	3. 200	27. 200	148. 100
3/28/81	11: 52: 13	-15	21. 975'	75 50. 496'	3	15. 553	22. 051	27. 825	689. 43	22. 092	178. 960	1120. 00	2. 600	25. 800	145. 900
3/28/81	12: 7: 13	-15	21. 975'	75 50. 496'	3	15. 768	22. 051	26. 653	689. 19	22. 632	178. 370	1120. 00	2. 200	26. 300	147. 500
3/28/81	12: 22: 13	-15	21. 975'	75 50. 496'	3	15. 558	22. 106	29. 715	690. 88	22. 900	179. 000	1120. 00	2. 700	27. 100	146. 700
3/28/81	12: 37: 13	-15	21. 975'	75 50. 496'	3	15. 898	22. 280	27. 459	690. 97	23. 035	179. 350	1120. 00	2. 600	25. 200	148. 200
3/28/81	12: 52: 13	-15	21. 975'	75 50. 496'	3	15. 840	22. 454	26. 461	690. 24	23. 064	182. 050	1120. 00	2. 900	23. 700	148. 000
3/28/81	13: 7: 13	-15	21. 975'	75 50. 496'	3	16. 444	22. 460	25. 429	693. 60	23. 036	174. 770	1120. 00	2. 900	22. 800	144. 400
3/28/81	13: 22: 13	-15	21. 975'	75 50. 496'	3	16. 433	22. 616	24. 204	626. 48	23. 038	173. 840	1120. 00	2. 900	23. 000	104. 500
3/28/81	13: 37: 13	-15	26. 402'	75 54. 437'	3	16. 448	22. 754	26. 404	327. 53	23. 091	174. 980	1306. 00	2. 900	24. 100	140. 400
3/28/81	13: 52: 13	-15	26. 402'	75 54. 437'	3	16. 818	22. 460	33. 291	377. 63	23. 126	106. 600	1306. 00	4. 400	28. 900	126. 600
3/28/81	14: 7: 13	-15	26. 402'	75 54. 437'	3	16. 105	22. 170	6. 367	144. 73	23. 101	43. 751	1306. 00	4. 400	9. 800	203. 500
3/28/81	14: 22: 13	-15	26. 402'	75 54. 437'	3	16. 582	22. 098	4. 143	146. 66	23. 048	36. 092	1306. 00	4. 400	8. 500	199. 500
3/28/81	14: 37: 13	-15	26. 402'	75 54. 437'	3	16. 439	22. 231	6. 857	133. 77	23. 043	30. 691	1306. 00	4. 400	11. 100	183. 200
3/28/81	14: 52: 13	-15	26. 402'	75 54. 437'	3	16. 222	22. 237	7. 037	127. 91	23. 035	30. 117	1306. 00	4. 400	10. 000	179. 400
3/28/81	15: 7: 13	-15	26. 402'	75 54. 437'	3	16. 805	22. 277	10. 124	130. 30	23. 035	194. 420	1306. 00	4. 400	12. 500	139. 000
3/28/81	15: 22: 13	-15	27. 432'	75 54. 502'	3	15. 599	22. 632	22. 460	196. 85	23. 054	288. 390	1452. 00	4. 400	26. 400	123. 500
3/28/81	15: 37: 13	-15	27. 103'	75 55. 322'	4	16. 900	22. 710	5. 305	130. 88	23. 036	30. 710	1506. 00	4. 400	8. 400	181. 800
3/28/81	15: 52: 13	-15	27. 111'	75 54. 959'	2	16. 461	22. 278	4. 995	109. 97	23. 064	37. 502	1524. 00	4. 400	8. 300	181. 900
3/28/81	16: 7: 15	-15	27. 111'	75 54. 959'	2	16. 447	22. 718	24. 878	347. 33	23. 076	127. 040	1524. 00	4. 400	20. 400	110. 300
3/28/81	16: 22: 15	-15	27. 111'	75 54. 959'	2	16. 237	22. 582	29. 654	365. 16	23. 076	131. 340	1524. 00	4. 400	25. 400	137. 600
3/28/81	16: 37: 15	-15	27. 111'	75 54. 959'	2	17. 025	22. 538	4. 773	131. 95	23. 093	40. 336	1524. 00	4. 400	8. 100	196. 700
3/28/81	16: 52: 18	-15	27. 111'	75 54. 959'	2	16. 937	22. 639	5. 758	132. 17	23. 097	31. 196	1524. 00	4. 400	9. 000	186. 500
3/28/81	17: 7: 18	-15	27. 111'	75 54. 959'	2	18. 174	22. 459	19. 233	152. 35	23. 097	305. 390	1524. 00	4. 400	23. 800	103. 300
3/28/81	17: 22: 18	-15	27. 767'	75 55. 251'	3	17. 957	22. 796	11. 665	129. 30	23. 107	61. 025	1652. 00	4. 400	15. 200	201. 300
3/28/81	17: 37: 18	-15	27. 707'	75 55. 216'	3	17. 333	22. 577	4. 020	140. 91	23. 098	36. 813	1708. 00	4. 400	8. 300	198. 600
3/28/81	17: 52: 18	-15	27. 707'	75 55. 216'	3	17. 638	22. 681	4. 484	132. 32	23. 127	45. 015	1708. 00	4. 400	8. 100	179. 700
3/28/81	18: 7: 18	-15	27. 707'	75 55. 216'	3	16. 263	23. 178	33. 392	378. 00	23. 151	92. 030	1708. 00	4. 400	29. 200	113. 000
3/28/81	18: 22: 18	-15	27. 707'	75 55. 216'	3	16. 360	23. 001	30. 391	378. 85	23. 083	101. 300	1708. 00	4. 400	26. 400	121. 900
3/28/81	18: 37: 18	-15	27. 707'	75 55. 216'	3	16. 886	22. 286	2. 372	137. 47	23. 018	43. 328	1708. 00	4. 400	6. 100	209. 800
3/28/81	18: 52: 18	-15	27. 707'	75 55. 216'	3	17. 028	22. 396	3. 015	139. 30	22. 977	46. 804	1708. 00	4. 400	7. 100	211. 500
3/28/81	19: 7: 18	-15	27. 707'	75 55. 216'	3	16. 443	22. 396	22. 715	169. 07	22. 923	298. 460	1708. 00	4. 400	26. 600	110. 100
3/28/81	19: 22: 18	-15	27. 707'	75 55. 216'	3	17. 137	22. 305	6. 257	134. 61	22. 901	37. 314	1708. 00	4. 400	9. 700	190. 500
3/28/81	19: 37: 18	-15	27. 707'	75 55. 216'	3	17. 333	22. 338	3. 095	124. 53	22. 873	46. 283	1708. 00	4. 400	6. 900	202. 500
3/28/81	19: 52: 18	-15	27. 707'	75 55. 216'	3	17. 328	22. 395	3. 586	132. 02	22. 832	44. 961	1708. 00	4. 400	7. 700	201. 500
3/28/81	20: 7: 18	-15	27. 707'	75 55. 216'	3	17. 253	22. 410	3. 205	142. 83	22. 711	49. 870	1708. 00	4. 400	7. 500	215. 100
3/28/81	20: 22: 18	-15	27. 707'	75 55. 216'	3	17. 070	22. 452	2. 265	124. 20	22. 616	48. 291	1708. 00	4. 400	5. 300	201. 200
3/28/81	20: 37: 18	-15	25. 200'	75 53. 426'	3	17. 112	22. 459	2. 669	147. 07	22. 552	53. 076	2010. 00	4. 400	6. 800	219. 400
3/28/81	20: 52: 18	-15	25. 200'	75 53. 426'	3	16. 677	23. 056	23. 511	328. 01	22. 517	137. 710	2010. 00	4. 400	19. 300	98. 900
3/28/81	21: 7: 18	-15	25. 200'	75 53. 426'	3	16. 869	23. 899	27. 844	347. 87	22. 578	159. 520	2010. 00	4. 400	23. 000	145. 400
3/28/81	21: 22: 18	-15	25. 200'	75 53. 426'	3	17. 111	23. 899	27. 056	346. 17	22. 826	159. 710	2010. 00	4. 400	23. 300	143. 400
3/28/81	21: 37: 18	-15	25. 200'	75 53. 426'	3	17. 548	23. 000	3. 100	115. 16	22. 962	50. 052	2010. 00	4. 400	6. 600	203. 800
3/28/81	21: 52: 18	-15	25. 200'	75 53. 426'	3	17. 555	22. 829	3. 461	131. 77	22. 972	51. 115	2010. 00	4. 400	7. 100	209. 200

DATE	TIME	DEG.	MIN-LAT	DEG.	MIN-LNG	FIX	DENPOIN	AIRTEMP	APPRWSR	APPRWSR	SEATEMP	GYROHED	ZULUFX	MANUSPD	TRWDSPD	TRWDIR
3/28/81	22: 7: 18	-15	25.200'	75	53.426'	3	17.851	22.759	4.905	154.42	22.933	48.491	2010.00	4.400	9.100	217.400
3/28/81	22: 22: 18	-15	26.718'	75	54.574'	3	17.585	22.469	4.055	140.90	22.891	47.192	2200.00	4.400	8.100	204.200
3/28/81	22: 37: 18	-15	26.718'	75	54.574'	3	17.044	22.394	19.363	326.78	22.833	137.160	2200.00	4.400	15.400	93.700
3/28/81	22: 52: 18	-15	26.718'	75	54.574'	3	16.943	22.466	22.053	341.62	22.832	157.850	2200.00	3.200	19.300	136.300
3/28/81	23: 7: 18	-15	26.718'	75	54.574'	3	17.111	22.460	23.101	342.48	22.823	159.920	2200.00	3.200	20.200	140.000
3/28/81	23: 22: 18	-15	26.718'	75	54.574'	3	16.668	22.442	23.363	343.47	22.948	160.010	2200.00	3.200	20.500	141.000
3/28/81	23: 37: 20	-15	26.718'	75	54.574'	3	16.970	22.462	23.215	344.98	22.991	161.070	2200.00	3.100	20.100	143.300
3/28/81	23: 52: 20	-15	26.718'	75	54.574'	3	17.048	22.468	24.922	339.74	23.052	159.640	2200.00	3.000	22.000	135.400
3/28/81	0: 7: 20	-15	26.718'	75	54.574'	3	16.674	22.621	24.762	339.74	23.092	161.330	2200.00	3.000	21.800	139.300
3/29/81	0: 22: 20	-15	26.718'	75	54.574'	3	16.892	22.615	24.896	342.59	23.153	160.940	2200.00	3.000	22.500	140.400
3/29/81	0: 37: 20	-15	26.718'	75	54.574'	3	16.969	22.634	26.191	334.86	23.238	161.000	2200.00	2.700	23.700	133.000
3/29/81	0: 52: 20	-15	30.777'	75	55.044'	3	16.636	22.771	25.974	331.27	23.299	161.110	22.00	2.800	22.800	140.300
3/29/81	1: 7: 20	-15	30.777'	75	55.044'	3	16.666	22.841	25.930	334.85	23.371	158.280	22.00	2.800	23.300	130.000
3/29/81	1: 22: 20	-15	30.777'	75	55.044'	3	16.525	22.640	29.238	336.37	23.434	160.800	22.00	2.800	26.600	135.200
3/29/81	1: 37: 20	-15	30.777'	75	55.044'	3	15.953	22.638	28.001	339.10	23.519	160.830	22.00	1.300	26.600	139.100
3/29/81	1: 52: 20	-15	30.777'	75	55.044'	3	15.929	22.520	29.671	344.24	23.530	158.260	22.00	1.300	24.400	141.600
3/29/81	2: 7: 20	-15	30.777'	75	55.044'	3	15.780	22.801	26.809	344.84	23.553	157.420	22.00	1.400	25.500	140.800
3/29/81	2: 22: 20	-15	30.777'	75	55.044'	3	16.191	22.727	24.761	336.98	23.660	160.290	22.00	1.400	25.500	140.800
3/29/81	2: 37: 20	-15	34.953'	75	51.594'	6	15.784	22.347	26.518	365.27	23.715	119.460	204.00	2.500	24.000	124.900
3/29/81	2: 52: 20	-15	36.226'	75	55.811'	3	16.190	22.476	25.257	363.83	23.743	122.030	230.00	2.600	22.500	126.300
3/29/81	3: 7: 20	-15	36.226'	75	55.811'	3	16.520	22.574	20.389	357.14	23.752	123.020	230.00	2.600	17.000	119.400
3/29/81	3: 22: 20	-15	36.226'	75	55.811'	3	15.923	22.451	22.728	356.89	23.752	120.120	230.00	2.600	17.000	119.400
3/29/81	3: 37: 20	-15	36.226'	75	55.811'	3	15.736	22.281	23.954	363.69	23.725	110.510	230.00	2.000	22.600	114.000
3/29/81	3: 52: 20	-15	36.226'	75	55.811'	3	15.555	22.262	21.686	368.24	23.694	107.930	230.00	2.000	19.400	117.600
3/29/81	4: 7: 20	-15	36.226'	75	55.811'	3	15.333	22.230	22.837	378.93	23.687	105.110	230.00	2.000	20.800	127.000
3/29/81	4: 22: 20	-15	36.534'	75	54.129'	4	15.464	22.463	26.193	369.59	23.687	110.320	352.00	2.000	24.000	121.400
3/29/81	4: 37: 20	-15	36.494'	75	53.677'	4	15.766	22.457	23.904	336.88	23.690	156.250	352.00	3.700	20.800	129.000
3/29/81	5: 7: 20	-15	36.576'	75	50.153'	3	15.796	22.582	25.608	337.44	23.682	150.900	434.00	3.700	22.000	124.600
3/29/81	5: 22: 20	-15	36.576'	75	50.153'	3	15.737	22.500	23.149	335.65	23.766	150.270	434.00	3.700	19.600	121.600
3/29/81	5: 37: 20	-15	36.576'	75	50.153'	3	15.969	22.484	24.102	336.99	23.812	146.710	434.00	3.700	20.700	120.300
3/29/81	5: 52: 20	-15	36.576'	75	50.153'	3	15.773	22.599	22.968	335.22	23.901	145.870	434.00	3.700	19.800	116.800
3/29/81	6: 7: 20	-15	36.576'	75	50.153'	3	15.559	22.478	24.729	344.77	23.964	135.550	434.00	3.700	21.000	118.500
3/29/81	6: 22: 20	-15	36.576'	75	50.153'	3	15.637	22.624	23.676	340.35	23.993	138.110	434.00	3.700	19.900	114.900
3/29/81	6: 37: 20	-15	36.576'	75	50.153'	3	15.558	22.509	25.062	339.94	24.009	138.290	434.00	2.900	22.600	116.400
3/29/81	6: 52: 20	-15	36.576'	75	50.153'	3	15.473	22.570	23.101	341.50	24.032	138.090	434.00	2.900	20.300	117.500
3/29/81	7: 7: 20	-15	36.576'	75	50.153'	3	15.640	22.463	24.430	338.07	24.033	138.880	434.00	3.000	21.700	113.900
3/29/81	7: 22: 22	-15	36.576'	75	50.153'	3	15.558	22.640	23.780	347.34	24.040	135.970	434.00	2.900	20.800	121.000
3/29/81	7: 37: 22	-15	36.576'	75	50.153'	3	15.699	22.640	21.493	342.30	24.033	136.690	434.00	2.900	19.100	117.300
3/29/81	7: 52: 22	-15	36.576'	75	50.153'	3	15.770	22.458	23.260	338.44	24.030	136.830	434.00	3.000	20.100	111.300
3/29/81	8: 7: 22	-15	44.520'	75	49.216'	3	15.364	22.573	23.020	340.51	24.025	136.570	736.00	2.900	20.500	114.600
3/29/81	8: 22: 22	-15	44.520'	75	49.216'	3	15.111	22.476	24.070	340.30	24.023	136.790	736.00	2.900	21.300	112.100
3/29/81	8: 37: 22	-15	44.520'	75	49.216'	3	15.111	22.462	23.858	342.20	24.005	136.630	736.00	3.300	20.700	115.800
3/29/81	8: 52: 22	-15	44.520'	75	49.216'	3	14.678	22.460	22.763	339.26	24.009	134.710	736.00	3.300	20.000	111.000
3/29/81	9: 7: 22	-15	44.520'	75	49.216'	3	14.888	22.476	22.605	344.51	24.032	131.720	736.00	3.400	19.500	116.100
3/29/81	9: 22: 22	-15	44.520'	75	49.216'	3	15.111	22.460	23.754	342.33	24.093	133.020	736.00	3.300	20.900	114.000
3/29/81	9: 52: 22	-15	48.496'	75	45.569'	3	14.884	22.460	19.804	343.53	24.115	134.470	922.00	3.300	16.800	114.000
3/29/81	10: 7: 22	-15	48.496'	75	45.569'	3	15.028	22.393	21.596	340.35	24.123	133.590	922.00	3.400	18.900	110.300
3/29/81	10: 22: 22	-15	48.496'	75	45.569'	3	15.245	22.469	23.810	337.55	24.126	134.510	922.00	3.300	20.700	109.500
3/29/81	10: 37: 24	-15	48.496'	75	45.569'	3	14.892	22.445	22.547	342.48	24.149	131.090	922.00	3.300	19.300	113.300
3/29/81	10: 52: 24	-15	51.091'	75	43.097'	3	14.900	22.274	3.523	134.54	24.150	134.410	1030.00	3.300	6.000	133.700
3/29/81	11: 7: 24	-15	51.091'	75	43.097'	3	14.806	22.259	1.913	141.51	24.061	134.660	1030.00	11.500	13.100	148.900
3/29/81	11: 22: 24	-15	51.091'	75	43.097'	3	14.878	22.124	3.165	129.27	23.919	134.310	1030.00	11.500	14.000	143.700
3/29/81	11: 37: 24	-15	51.091'	75	43.097'	3	14.892	22.273	3.431	125.02	23.867	135.540	1030.00	11.500	13.800	144.800
3/29/81	11: 52: 24	-15	51.091'	75	43.097'	3	14.919	22.262	5.730	127.72	23.771	134.280	1030.00	11.500	15.300	138.600
3/29/81	12: 7: 24	-15	51.091'	75	43.097'	3	14.919	22.151	3.849	133.19	23.544	135.250	1030.00	11.500	14.100	144.000
3/29/81	12: 22: 24	-15	51.091'	75	43.097'	3	14.871	22.280	4.501	139.64	23.325	135.490	1030.00	11.500	15.300	144.600
3/29/81	12: 37: 25	-15	51.091'	75	43.097'	3	14.701	22.451	6.783	129.41	22.969	136.340	1030.00	11.500	16.400	138.500
3/29/81	12: 52: 25	-15	33.916'	75	51.925'	3	13.638	22.465	3.031	201.44	22.589	44.108	1218.00	14.100	230.700	

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDDIR
3/29/81	13: 7: 25	-15 33.916'	75 51.925'	3	13.962	22.632	5.154	145.22	22.179	70.385	1218.00	1.600	6.100 224.400
3/29/81	13:22:29	-15 33.916'	75 51.925'	3	13.665	22.595	5.638	136.44	22.056	42.033	1218.00	1.600	6.800 191.100
3/29/81	13:37:25	-15 33.916'	75 51.925'	3	13.829	22.573	4.579	136.99	21.932	39.714	1218.00	1.600	5.800 187.600
3/29/81	13:52:25	-15 33.916'	75 51.925'	3	13.725	22.303	4.112	140.63	21.886	41.982	1218.00	1.600	5.400 191.800
3/29/81	14: 7: 25	-15 26.620'	75 54.728'	3	13.306	22.152	5.754	136.39	21.824	42.127	1340.00	1.600	7.000 187.700
3/29/81	14:22:25	-15 26.620'	75 54.728'	3	13.637	22.256	4.558	148.37	21.799	44.446	1340.00	1.600	6.100 200.600
3/29/81	14:37:25	-15 25.761'	75 55.299'	3	13.523	22.281	6.889	141.44	21.825	40.785	1418.00	1.600	8.100 189.900
3/29/81	14:52:25	-15 25.761'	75 55.299'	3	13.969	22.280	3.657	129.48	21.611	33.829	1418.00	1.600	5.000 179.400
3/29/81	15: 7: 25	-15 25.761'	75 55.299'	3	13.333	22.819	29.357	352.13	21.630	139.390	1418.00	1.600	27.600 131.400
3/29/81	15:22:25	-15 25.761'	75 55.299'	3	13.353	22.000	31.228	352.58	21.771	140.430	1418.00	1.600	30.000 132.800
3/29/81	15:37:25	-15 25.761'	75 55.299'	3	13.240	22.351	4.140	167.05	22.064	50.373	1418.00	1.700	5.500 223.100
3/29/81	15:52:25	-15 27.848'	75 53.958'	3	13.791	22.948	16.733	148.87	22.127	333.190	1530.00	1.600	18.200 125.600
3/29/81	16: 7: 25	-15 27.848'	75 53.958'	3	13.713	22.930	21.389	155.62	22.110	319.710	1530.00	1.600	23.300 118.100
3/29/81	16:22:25	-15 27.800'	75 53.783'	3	14.656	22.706	15.857	140.14	22.156	173.190	1600.00	1.600	17.200 316.800
3/29/81	16:37:25	-15 27.800'	75 53.783'	3	13.748	22.460	3.057	131.16	22.158	29.858	1600.00	1.600	4.500 176.900
3/29/81	16:52:25	-15 27.650'	75 54.142'	3	14.004	22.459	4.010	131.91	22.191	34.636	1618.00	1.600	5.000 181.500
3/29/81	17: 7: 25	-15 27.650'	75 54.142'	3	14.004	22.460	3.661	136.43	22.192	45.236	1618.00	1.600	4.800 193.200
3/29/81	17:22:25	-15 27.650'	75 54.142'	3	13.998	22.458	3.984	135.05	22.173	49.006	1618.00	1.600	4.800 196.200
3/29/81	17:37:25	-15 27.650'	75 54.142'	3	13.811	22.299	2.798	131.24	22.088	47.801	1618.00	1.600	4.000 193.800
3/29/81	17:52:25	-15 27.650'	75 54.142'	3	13.998	22.455	3.332	133.24	21.966	43.820	1618.00	1.600	4.900 191.700
3/29/81	18: 7: 25	-15 27.650'	75 54.142'	3	14.209	22.288	4.437	127.12	21.838	39.609	1618.00	1.600	4.800 179.700
3/29/81	18:22:25	-15 27.650'	75 54.142'	3	14.015	22.451	4.012	132.13	21.817	51.848	1618.00	1.600	5.400 196.200
3/29/81	18:37:25	-15 25.519'	75 56.650'	4	13.999	22.394	2.841	134.34	21.838	47.431	1806.00	1.600	4.200 179.200
3/29/81	18:52:25	-15 25.519'	75 56.650'	4	14.357	22.280	3.055	138.85	21.827	44.785	1806.00	1.600	4.400 199.400
3/29/81	19: 7: 25	-15 25.519'	75 56.650'	4	13.382	22.652	22.538	163.51	21.762	325.970	1806.00	1.600	24.200 131.200
3/29/81	19:22:25	-15 25.519'	75 56.650'	4	13.111	22.482	21.107	160.42	21.753	324.780	1806.00	1.600	22.500 127.000
3/29/81	19:37:25	-15 25.519'	75 56.650'	4	14.446	22.416	4.813	129.59	21.766	51.472	1806.00	1.600	5.300 184.400
3/29/81	19:52:25	-15 25.519'	75 56.650'	4	14.233	22.323	3.194	123.31	21.739	50.651	1806.00	1.600	4.400 195.200
3/29/81	20: 7: 25	-15 25.519'	75 56.650'	4	13.999	22.323	3.819	121.52	21.676	51.035	1806.00	1.700	5.100 109.800
3/29/81	20:22:25	-15 25.519'	75 56.650'	4	14.496	22.283	3.157	130.17	21.663	45.476	1806.00	1.600	4.600 191.400
3/29/81	20:37:25	-15 25.519'	75 56.650'	4	14.523	22.166	2.268	114.83	21.635	48.956	1806.00	1.600	3.500 190.600
3/29/81	20:52:25	-15 25.519'	75 56.650'	4	14.581	22.280	3.735	129.16	21.604	47.065	1806.00	1.600	5.000 191.900
3/29/81	21: 7: 25	-15 25.519'	75 56.650'	4	15.508	22.296	19.352	198.79	21.561	301.720	1806.00	1.600	20.700 92.400
3/29/81	21:22:25	-15 25.519'	75 56.650'	4	14.272	22.441	2.024	298.25	21.536	78.713	1806.00	1.600	2.600 315.800
3/29/81	21:37:25	-15 23.112'	75 58.552'	3	14.371	22.943	14.492	394.78	21.540	102.330	2106.00	1.600	12.400 93.600
3/29/81	21:52:25	-15 23.112'	75 58.552'	3	14.455	23.385	18.483	384.63	21.461	103.580	2106.00	1.600	17.000 135.900
3/29/81	22: 7: 25	-15 23.112'	75 58.552'	3	14.505	23.272	14.779	394.42	21.418	99.086	2106.00	1.600	12.900 138.200
3/29/81	22:22:25	-15 23.112'	75 58.552'	3	15.097	22.599	4.371	134.67	21.366	49.450	2106.00	1.700	6.100 201.000
3/29/81	22:37:25	-15 23.112'	75 58.552'	3	14.889	22.119	3.721	129.48	21.255	53.660	2106.00	1.600	4.800 178.800
3/29/81	22:52:25	-15 22.096'	75 58.902'	3	15.111	21.987	3.693	128.83	21.141	54.097	2216.00	1.600	5.100 197.300
3/29/81	23: 7: 25	-15 22.096'	75 58.902'	3	14.777	21.740	12.360	299.90	21.027	91.079	2216.00	1.600	10.800 13.400
3/29/81	23:22:25	-15 22.096'	75 58.902'	3	14.009	21.807	27.930	371.55	21.038	120.160	2216.00	1.600	21.400 133.500
3/29/81	23:37:25	-15 22.096'	75 58.902'	3	13.929	21.854	23.820	374.54	20.982	121.690	2216.00	1.900	22.200 136.800
3/29/81	23:52:25	-15 22.096'	75 58.902'	3	13.999	21.740	24.200	376.60	20.927	118.050	2216.00	1.700	22.300 135.600

C STATION #2 BEGAN AT 13:00Z 3/29/81 ATMOSPHERIC SAMPLING BEGAN AT 23:30Z

3/29/81	0: 7: 25	-15 22.096'	75 58.902'	3	13.886	21.740	23.655	374.38	20.914	120.410	2216.00	1.800	21.800 136.700
3/30/81	0:22:26	-15 21.921'	75 58.207'	3	13.555	21.740	25.480	374.48	20.864	120.360	2.00	1.700	23.500 135.000
3/30/81	0:37:26	-15 21.921'	75 58.207'	3	13.766	21.740	24.743	374.73	20.803	118.910	2.00	1.700	23.100 134.900
3/30/81	0:52:29	-15 21.921'	75 58.207'	3	13.566	21.740	25.732	379.19	20.770	118.670	2.00	1.900	23.900 139.500
3/30/81	1: 7: 32	-15 21.921'	75 58.207'	3	13.115	21.853	26.924	381.18	20.689	117.980	2.00	1.900	25.000 140.600
3/30/81	1:22:35	-15 22.369'	75 57.072'	3	13.496	21.740	25.536	372.13	20.619	119.940	58.00	1.900	23.500 132.400
3/30/81	1:37:38	-15 22.369'	75 57.072'	3	13.473	21.740	25.216	376.16	20.516	118.010	58.00	1.900	23.500 135.900
3/30/81	1:52:41	-15 22.369'	75 57.072'	3	13.743	21.798	23.259	368.72	20.562	121.510	58.00	1.900	22.000 131.600
3/30/81	2: 7: 44	-15 22.545'	75 56.153'	2	13.364	21.740	25.017	372.73	20.600	119.540	142.00	1.900	23.100 134.100
3/30/81	2:22:47	-15 22.545'	75 56.153'	2	13.637	21.740	26.052	370.83	20.651	119.910	142.00	1.900	24.300 130.600
3/30/81	2:37:50	-15 22.545'	75 56.153'	2	13.693	21.740	24.174	371.76	20.663	120.620	142.00	1.900	22.500 133.400
3/30/81	2:52:53	-15 22.545'	75 56.153'	2	13.692	21.561	24.532	374.72	20.578	119.650	142.00	1.900	23.000 135.300
3/30/81	3: 7: 56	-15 22.940'	75 54.655'	3	13.415	21.626	26.217	375.59	20.539	116.660	242.00	1.900	24.200 133.100

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APRNSP	APPRDUR	SEATEMP	GYROH-D	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/30/81	3:22:59	-15 22.940'	75 54.655'	3	13.415	21.698	26.164	376.18	20.490	117.029	242.00	1.900	24.200	134.100
3/30/81	3:38:2	-15 22.940'	75 54.655'	3	13.514	21.740	23.733	369.25	20.451	121.680	242.00	1.900	21.700	132.000
3/30/81	3:53:5	-15 22.975'	75 54.066'	3	14.418	21.387	24.572	366.38	20.473	121.660	326.00	1.900	22.200	128.900
3/30/81	4:8:8	-15 23.237'	75 53.786'	3	14.082	21.515	24.438	372.83	20.523	117.020	344.00	1.900	22.700	130.500
3/30/81	4:23:11	-15 23.237'	75 53.786'	3	14.051	21.447	23.794	371.25	20.615	121.060	344.00	1.900	21.800	133.400
3/30/81	4:38:14	-15 23.237'	75 53.786'	3	13.949	21.497	23.543	371.12	20.679	119.650	344.00	1.900	22.900	132.600
3/30/81	4:53:17	-15 23.237'	75 53.786'	3	14.019	21.557	23.113	366.41	20.744	123.420	344.00	1.900	21.500	130.700
3/30/81	5:8:20	-15 23.237'	75 53.786'	3	14.196	21.422	24.381	367.98	20.806	123.700	344.00	2.000	22.400	132.800
3/30/81	5:23:23	-15 23.237'	75 53.786'	3	14.218	21.396	26.696	367.93	20.866	120.040	344.00	1.900	24.800	128.900
3/30/81	5:38:26	-15 23.237'	75 53.786'	3	14.028	21.340	26.837	367.54	20.866	120.210	344.00	4.100	23.000	129.100
3/30/81	5:53:29	-15 23.237'	75 53.786'	3	13.774	21.380	26.478	369.94	20.759	119.550	344.00	4.200	22.200	131.300
3/30/81	6:8:32	-15 23.237'	75 53.786'	3	13.839	21.380	25.179	368.69	20.878	120.040	344.00	4.100	20.700	129.900
3/30/81	6:23:35	-15 23.237'	75 53.786'	3	13.808	21.382	27.286	370.29	21.018	120.200	344.00	4.000	20.900	131.700
3/30/81	6:38:38	-15 23.237'	75 53.786'	3	13.776	21.423	26.880	370.21	21.234	119.860	344.00	4.000	22.800	131.700
3/30/81	6:53:41	-15 23.237'	75 53.786'	3	13.633	21.423	26.880	367.99	21.309	119.650	648.00	4.000	20.200	129.400
3/30/81	7:8:44	-15 26.703'	75 48.273'	3	13.705	21.512	24.156	365.92	21.326	118.970	648.00	3.900	22.500	126.100
3/30/81	7:23:47	-15 26.703'	75 48.273'	3	13.307	21.560	26.566	365.92	21.312	119.870	648.00	4.000	23.900	125.500
3/30/81	7:38:50	-15 26.703'	75 48.273'	3	13.281	21.602	28.143	364.85	21.312	119.870	648.00	4.000	21.000	127.300
3/30/81	7:53:53	-15 26.703'	75 48.273'	3	13.111	21.715	24.892	365.89	21.348	120.110	648.00	4.000	22.800	127.300
3/30/81	8:8:56	-15 26.703'	75 48.273'	3	13.544	21.576	26.813	366.41	21.559	119.500	648.00	3.900	21.000	127.300
3/30/81	8:23:59	-15 26.703'	75 48.273'	3	13.113	21.576	27.847	366.37	21.701	119.420	648.00	3.900	23.700	127.600
3/30/81	8:39:2	-15 26.703'	75 48.273'	3	13.195	21.674	24.431	365.56	21.819	120.010	648.00	4.000	20.500	125.600
3/30/81	8:54:5	-15 28.969'	75 43.460'	3	13.373	21.737	26.593	372.94	21.924	118.640	832.00	4.000	22.700	133.200
3/30/81	9:9:8	-15 28.969'	75 43.460'	3	13.716	21.626	26.597	363.85	22.018	120.500	832.00	3.900	21.700	124.800
3/30/81	9:24:11	-15 28.969'	75 43.460'	3	13.336	21.585	26.735	364.48	22.112	121.690	832.00	4.000	22.500	127.400
3/30/81	9:39:14	-15 28.969'	75 43.460'	3	13.323	21.732	24.903	363.82	22.269	121.010	832.00	4.000	20.600	124.900
3/30/81	9:54:17	-15 28.969'	75 43.460'	3	13.416	21.566	25.066	365.46	22.269	121.010	832.00	4.000	20.900	127.200
3/30/81	10:9:20	-15 30.712'	75 41.173'	3	13.544	21.581	26.488	363.41	22.315	120.580	942.00	4.000	22.500	124.400
3/30/81	10:24:23	-15 30.712'	75 41.173'	3	13.734	21.733	4.091	151.79	22.327	10.695	942.00	4.000	8.000	178.700
3/30/81	10:39:26	-15 30.836'	75 39.194'	3	13.504	21.381	5.231	143.58	21.665	8.648	1022.00	3.900	8.400	168.800
3/30/81	10:54:29	-15 30.836'	75 39.194'	3	12.697	20.338	3.851	160.33	20.550	7.555	1022.00	4.000	7.600	180.300
3/30/81	11:9:32	-15 30.836'	75 39.194'	3	11.919	19.224	2.004	179.95	19.428	7.624	1022.00	3.900	5.600	182.900
3/30/81	11:24:35	-15 30.836'	75 39.194'	3	11.356	18.681	1.228	264.65	18.766	5.776	1022.00	4.000	4.300	203.300
3/30/81	11:39:38	-15 30.836'	75 39.194'	3	11.080	18.500	1.648	111.55	18.316	7.955	1022.00	4.000	4.800	169.100
3/30/81	11:54:41	-15 18.659'	75 38.211'	3	10.444	18.320	2.987	121.49	17.565	7.971	1128.00	4.000	6.000	163.200
3/30/81	12:9:44	-15 18.659'	75 38.211'	3	9.834	18.098	4.228	127.37	16.803	7.660	1128.00	11.300	14.400	173.500
3/30/81	12:24:47	-15 18.659'	75 38.211'	3	10.222	17.847	7.009	123.98	15.833	349.650	1128.00	11.300	16.100	149.000
3/30/81	12:39:50	-15 18.659'	75 38.211'	3	9.773	17.667	5.667	124.29	15.425	350.280	1128.00	11.400	15.200	152.900
3/30/81	12:54:53	-15 6.434'	75 38.273'	2	9.914	17.941	6.825	125.30	15.515	344.480	1234.00	11.300	16.200	143.600
3/30/81	13:9:56	-15 6.434'	75 38.273'	2	9.405	18.137	6.861	296.89	15.620	235.860	1234.00	11.400	11.900	118.400
3/30/81	13:24:59	-15 6.434'	75 38.273'	2	9.503	17.982	6.059	283.36	15.693	256.740	1234.00	11.400	13.200	105.000
3/30/81	13:40:2	-15 1.109'	75 39.825'	5	10.334	17.906	10.485	141.64	15.684	354.450	1234.00	11.400	12.000	107.100
3/30/81	13:55:5	-15 1.109'	75 39.825'	5	9.696	17.828	13.489	57.14	15.694	58.617	1330.00	11.300	20.900	155.800
3/30/81	14:10:8	-15 1.109'	75 39.825'	5	9.504	18.132	11.737	515.68	15.704	288.290	1330.00	11.300	22.500	116.100
3/30/81	14:40:14	-14 59.328'	75 38.853'	3	10.157	17.713	18.043	143.40	15.705	16.744	1422.00	11.300	27.600	173.800
3/30/81	14:55:17	-14 59.328'	75 38.853'	3	10.298	17.805	14.335	134.71	15.727	41.510	1422.00	11.400	23.900	196.000
3/30/81	15:10:20	-14 59.328'	75 38.853'	3	9.780	17.780	9.237	125.34	15.728	60.141	1422.00	11.400	18.200	215.700
3/30/81	15:25:23	-14 59.328'	75 38.853'	3	9.555	17.780	8.416	130.15	15.689	68.707	1422.00	11.400	17.900	226.900
3/30/81	15:40:26	-14 59.015'	75 38.859'	3	9.555	17.896	6.060	117.91	15.674	69.640	1512.00	11.300	15.500	228.000
3/30/81	15:55:29	-14 58.855'	75 38.581'	3	9.544	17.780	7.764	129.64	15.700	69.229	1530.00	11.400	17.400	228.900
3/30/81	16:10:32	-14 58.855'	75 38.581'	3	9.746	18.115	6.467	129.63	15.754	66.125	1530.00	11.300	15.900	227.800
3/30/81	16:25:35	-14 58.855'	75 38.581'	3	9.306	18.645	18.226	321.01	15.803	216.630	1530.00	11.400	11.800	159.800
3/30/81	16:40:38	-14 58.855'	75 38.581'	3	10.218	19.049	21.908	328.47	15.788	231.540	1530.00	11.400	13.400	173.800
3/30/81	16:55:41	-14 58.855'	75 38.581'	3	11.046	19.398	17.031	313.32	15.894	235.700	1530.00	11.300	12.000	147.900
3/30/81	17:10:44	-14 58.855'	75 38.581'	3	10.423	18.917	6.048	292.24	16.005	270.800	1530.00	11.400	10.900	122.000
3/30/81	17:25:47	-14 58.855'	75 38.581'	3	10.414	19.014	6.081	285.08	16.092	266.200	1530.00	11.300	11.300	118.200
3/30/81	17:40:50	-15 0.161'	75 40.499'	3	10.496	18.876	6.044	287.65	16.156	269.710	1712.00	11.300	11.000	119.200
3/30/81	17:55:53	-15 0.161'	75 40.499'	3	10.666	18.794	6.738	272.20	16.228	268.090	1712.00	11.300	12.200	121.800
3/30/81	18:10:56	-15 0.161'	75 40.499'	3	10.883	18.843	6.151	291.92	16.274	270.240	1712.00	11.400	10.600	121.800

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DATE	TIME	DEG.	MIN-LAT	DEG.	MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPRWSR	APPRDR	SEATEMP	GYROHED	ZULUFIX	MAHLSPD	TRWDSPD	TRWDIR
3/30/81	18:25:59	-15	0 161'	75	40 499'	3	7.374	18.706	5.980	298.29	16.350	268.410	1712.03	11.400	10.700	119.800
3/30/81	18:41:2	-15	0 161'	75	40 499'	3	11.025	19.035	6.129	295.58	16.416	267.480	1712.03	11.400	9.800	118.600
3/30/81	18:56:5	-15	0 161'	75	40 499'	3	10.808	19.937	20.295	396.82	16.323	104.440	1712.03	11.300	12.700	172.900
3/30/81	19:11:8	-15	0 161'	75	40 499'	3	10.806	19.085	21.131	396.83	15.993	105.260	1712.03	11.400	13.700	171.900
3/30/81	19:26:11	-15	0 161'	75	40 499'	3	9.855	18.861	30.936	308.17	15.754	107.610	1712.00	11.400	21.600	150.800
3/30/81	19:41:14	-15	0 161'	75	40 499'	3	9.781	18.705	33.268	388.31	15.955	105.850	1712.00	11.400	23.500	147.600
3/30/81	19:56:17	-15	0 161'	75	40 499'	3	9.591	18.859	30.377	391.19	15.328	109.600	1712.00	11.300	21.500	156.800
3/30/81	20:11:20	-15	0 161'	75	40 499'	3	10.846	19.580	24.413	680.66	15.175	209.680	1712.00	11.400	17.400	144.100
3/30/81	20:26:23	-15	0 161'	75	40 499'	3	9.833	19.047	8.363	310.23	15.280	253.790	1712.03	11.300	8.400	122.000
3/30/81	20:41:26	-15	4 120'	75	28 504'	3	9.893	18.893	9.902	167.81	15.139	100.210	2018.00	11.400	21.400	279.500
3/30/81	20:56:29	-15	4 120'	75	28 504'	3	10.485	19.509	20.385	486.45	14.998	52.863	2018.00	11.300	28.500	176.900
3/30/81	21:11:32	-15	4 120'	75	28 504'	3	9.989	19.772	30.233	361.62	14.958	144.910	2018.00	11.400	18.700	144.300
3/30/81	21:26:35	-15	4 120'	75	28 504'	3	9.778	18.858	10.063	130.25	14.876	63.006	2018.00	11.400	17.600	224.300
3/30/81	21:41:38	-15	4 120'	75	28 504'	3	9.789	18.860	7.224	140.05	14.876	60.034	2018.00	11.400	18.800	218.900
3/30/81	21:56:41	-15	3 281'	75	27 565'	4	9.805	18.927	9.432	130.22	14.866	61.996	2130.00	11.400	18.100	220.400
3/30/81	22:11:44	-15	3 281'	75	27 565'	4	9.480	19.253	26.615	314.67	14.863	201.020	2130.00	11.300	19.800	136.000
3/30/81	22:26:47	-15	3 660'	75	27 265'	2	9.080	18.681	10.364	298.21	14.810	260.730	2205.00	11.400	11.600	134.400
3/30/81	22:41:50	-15	3 660'	75	27 265'	2	9.201	18.680	28.806	319.28	14.850	229.390	2205.00	11.400	21.300	166.900
3/30/81	22:56:53	-15	3 660'	75	27 265'	2	9.581	17.784	27.209	327.94	15.026	223.570	2205.00	11.100	18.400	172.500
3/30/81	23:11:56	-15	3 660'	75	27 265'	2	10.418	18.313	27.555	326.77	15.250	222.540	2205.00	11.000	21.500	172.700
3/30/81	23:26:59	-15	3 660'	75	27 265'	2	10.887	18.484	28.775	329.32	15.567	222.470	2205.00	11.000	20.000	174.900
3/30/81	23:42:2	-15	6 851'	75	32 101'	3	11.320	18.323	24.888	326.01	15.899	223.090	2312.00	11.100	16.800	164.400
3/30/81	23:57:5	-15	6 851'	75	32 101'	3	11.558	18.630	24.177	328.92	16.758	221.400	2312.00	11.000	15.800	164.400
3/30/81	0:12:8	-15	6 851'	75	32 101'	3	11.755	19.015	22.343	326.88	17.415	222.730	2312.00	11.100	14.200	164.800
3/31/81	0:27:11	-15	6 851'	75	32 101'	3	11.999	19.333	24.344	328.80	17.385	222.110	2312.00	11.000	16.000	169.800
3/31/81	0:42:14	-15	6 851'	75	32 101'	3	13.051	19.752	21.666	327.21	17.989	222.860	2312.00	11.100	13.500	163.800
3/31/81	0:57:17	-15	6 851'	75	32 101'	3	13.321	20.455	24.427	327.90	18.243	222.700	2312.00	11.000	16.100	169.500
3/31/81	1:12:20	-15	6 851'	75	32 101'	3	13.553	21.015	24.939	325.39	19.005	222.680	2312.00	11.100	17.200	167.100
3/31/81	1:27:23	-15	6 851'	75	32 101'	3	14.209	21.560	25.915	324.39	19.773	223.190	2312.00	11.000	18.000	165.500
3/31/81	1:42:26	-15	6 851'	75	32 101'	3	14.242	22.229	26.648	323.51	21.179	222.550	2312.00	11.000	18.800	166.200
3/31/81	1:57:29	-15	26 537'	75	52 336'	3	14.240	22.107	7.781	136.49	21.704	44.768	134.00	11.100	17.100	207.800
3/31/81	2:12:32	-15	26 537'	75	52 336'	3	14.315	22.119	6.319	138.25	21.753	44.324	134.00	11.100	16.200	210.200
3/31/81	2:27:35	-15	26 537'	75	52 336'	3	14.666	22.280	6.507	124.47	21.756	42.420	134.00	11.100	15.600	203.900
3/31/81	2:42:38	-15	26 537'	75	52 336'	3	14.649	22.282	22.868	191.16	21.707	290.540	134.00	11.000	33.800	117.400
3/31/81	2:57:41	-15	27 192'	75	54 604'	3	14.887	22.280	6.738	138.83	21.687	40.503	238.00	11.100	16.100	204.100
3/31/81	3:12:44	-15	27 192'	75	54 604'	3	14.584	22.216	5.950	139.61	21.647	46.797	238.00	11.000	15.600	214.000
3/31/81	3:27:47	-15	27 192'	75	54 604'	3	14.150	22.100	21.069	174.03	21.526	301.790	238.00	11.000	32.000	118.000
3/31/81	3:42:50	-15	26 159'	75	55 960'	3	14.921	22.280	22.096	157.31	21.527	333.790	320.00	11.000	32.600	137.300
3/31/81	3:57:53	-15	26 159'	75	55 960'	3	13.587	22.145	22.773	186.58	21.557	308.250	320.00	11.100	33.800	134.300
3/31/81	4:12:56	-15	26 159'	75	55 960'	3	14.550	22.282	17.055	204.94	21.578	288.270	320.00	11.100	27.200	123.200
3/31/81	4:27:59	-15	26 159'	75	55 960'	3	14.808	22.116	12.914	145.40	21.552	194.020	320.00	11.100	22.100	353.500
3/31/81	4:43:2	-15	26 159'	75	55 960'	3	14.707	22.280	15.956	210.75	21.965	286.240	320.00	11.000	26.000	124.300
3/31/81	4:58:5	-15	28 112'	75	55 708'	5	15.485	22.278	22.204	157.99	21.620	333.960	426.00	11.100	32.500	138.300
3/31/81	5:13:8	-15	28 112'	75	55 708'	5	14.029	22.280	22.295	166.52	21.657	328.020	426.00	11.100	33.500	139.200
3/31/81	5:28:11	-15	28 112'	75	55 708'	5	13.751	22.279	22.761	174.05	21.719	321.210	426.00	11.100	33.900	136.700
3/31/81	5:43:14	-15	28 112'	75	55 708'	5	14.051	22.280	22.319	176.88	21.751	320.620	426.00	11.000	33.200	137.100
3/31/81	5:58:17	-15	28 112'	75	55 708'	5	14.442	22.280	22.158	184.04	21.773	314.590	426.00	11.100	33.200	137.300
3/31/81	6:13:20	-15	28 112'	75	55 708'	5	13.602	22.167	22.885	168.97	21.764	327.570	426.00	11.100	34.100	140.300
3/31/81	6:28:23	-15	28 112'	75	55 708'	5	14.982	22.124	8.275	143.25	21.786	42.238	426.00	11.100	18.200	207.400
3/31/81	6:43:26	-15	28 112'	75	55 708'	5	15.771	22.118	10.671	138.56	21.748	12.794	426.00	11.000	20.000	172.600
3/31/81	6:58:29	-15	28 112'	75	55 708'	5	15.227	21.750	4.357	131.40	21.289	39.339	426.00	11.100	14.400	208.600
3/31/81	7:13:32	-15	28 112'	75	55 708'	5	14.884	21.561	6.768	133.55	20.793	42.173	426.00	11.100	16.300	206.100
3/31/81	7:28:35	-15	28 112'	75	55 708'	5	14.807	21.444	7.591	132.57	20.558	33.613	426.00	11.100	16.500	195.000
3/31/81	7:43:38	-15	28 112'	75	55 708'	5	15.648	21.225	8.743	140.50	20.481	35.552	426.00	11.100	18.500	198.600
3/31/81	7:58:41	-15	24 131'	75	58 459'	3	14.444	21.444	21.337	132.28	20.401	38.616	426.00	11.100	15.000	204.100
3/31/81	8:13:44	-15	24 131'	75	58 459'	3	14.444	21.242	11.152	133.40	20.279	26.514	744.00	11.100	19.400	185.800
3/31/81	8:28:47	-15	24 131'	75	58 459'	3	15.777	21.380	14.855	137.28	20.233	171.230	744.00	11.100	29.900	325.900
3/31/81	8:43:50	-15	24 131'	75	58 459'	3	14.666	21.087	3.588	143.72	20.238	38.916	744.00	11.100	13.800	210.900
3/31/81	8:58:53	-15	24 131'	75	58 459'	3	14.433	21.027	4.592	130.26	20.208	38.690	744.00	11.000	14.900	204.600
3/31/81	9:13:56	-15	24 131'	75	58 459'	3	14.004	21.020	5.550	127.52	20.071	40.858	744.00	11.000	15.100	203.200

DATE	TIME	DEC,MIN-LAT	DEC,MIN-LNG	FIX	DENPOIN	AIRTEMP	APRWSP	APPRDUR	SEATEMP	GYROCHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
3/31/81	9:28:59	-15 24 131'	75 58 459'	3	14 063	21 020	5 514	135.70	19.956	42.343	744.00	11.100	15.500	207.300
3/31/81	9:44:2	-15 24 131'	75 58 459'	3	13 864	20 840	5 080	139.37	19.878	40.985	744.00	11.100	15.200	208.800
3/31/81	9:59:5	-15 22 305'	75 59 366'	3	14 191	20 711	5 565	134.91	19.778	38.232	930.00	8.300	12.700	200.200
3/31/81	10:14:8	-15 22 305'	75 59 366'	3	14 051	20 702	5 683	131.35	19.608	40.324	930.00	8.300	12.200	202.000
3/31/81	10:29:11	-15 22 305'	75 59 366'	3	13 959	20 663	4 011	125.07	19.471	43.421	930.00	8.300	11.200	204.200
3/31/81	10:44:14	-15 22 305'	75 59 366'	3	13 637	20 660	2 796	175.45	19.373	54.829	930.00	8.300	10.500	224.100
3/31/81	10:59:17	-15 22 305'	75 59 366'	3	12 222	20 300	7 705	208.41	19.126	59.415	930.00	10.800	17.000	258.800
3/31/81	11:14:20	-15 22 305'	75 59 366'	3	12 285	19 785	23 321	391.80	18 739	60.265	930.00	10.800	15.000	114.700
3/31/81	11:29:23	-15 22 305'	75 59 366'	3	11 586	18 863	24 747	391.05	18 310	59.710	930.00	10.800	16.400	110.400
3/31/81	11:44:23	-15 22 305'	75 59 366'	3	11 753	18 973	26 368	387.43	17 972	60.019	930.00	10.800	17.300	103.500
3/31/81	11:59:23	-15 22 305'	75 59 366'	3	11 777	18 885	24 093	393.99	18 579	60.166	930.00	10.800	16.600	114.500
3/31/81	12:14:23	-15 22 305'	75 59 366'	3	11 352	18 860	7 282	200.97	18 514	59.043	930.00	10.800	17.400	253.900
3/31/81	12:29:23	-15 22 305'	75 59 366'	3	10 888	18 344	2 719	171.96	18 209	49.195	930.00	10.800	13.600	228.500
3/31/81	12:44:23	-15 11 125'	75 43 630'	3	10 392	18 140	2 895	164.24	17 918	50.059	1226.00	10.900	13.200	229.200
3/31/81	12:59:23	-15 11 125'	75 43 630'	3	10 672	18 318	8 036	316.24	17 491	231.210	1226.00	800	7.200	185.100
3/31/81	13:14:23	-15 11 125'	75 43 630'	3	10 806	18 613	18 314	321.45	17 367	194.790	1226.00	800	17.400	153.100
3/31/81	13:29:23	-15 11 125'	75 43 630'	3	11 109	18 680	23 319	356.96	17 388	148.030	1226.00	1.300	22.000	145.000
3/31/81	13:44:23	-15 8 102'	75 40 201'	3	10 829	18 525	25 227	373.32	17 372	121.290	1312.00	1.300	24.000	134.600
3/31/81	13:59:23	-15 8 102'	75 40 201'	3	10 447	18 500	23 307	372.27	17 332	127.110	1312.00	1.300	22.200	135.200
3/31/81	14:14:23	-15 8 102'	75 40 201'	3	10 444	18 387	21 832	381.04	17 270	118.140	1312.00	1.300	20.300	140.800
3/31/81	14:29:23	-15 8 102'	75 40 201'	3	10 203	18 268	21 491	385.60	17 188	118.540	1312.00	1.300	20.200	146.100
3/31/81	14:44:23	-15 8 102'	75 40 201'	3	10 030	18 191	21 821	389.49	16 998	116.280	1312.00	1.900	20.000	148.600
3/31/81	14:59:23	-15 8 102'	75 40 201'	3	10 194	18 156	20 884	383.96	16 957	117.470	1456.00	1.900	19.000	145.500
3/31/81	15:14:23	-15 10 260'	75 36 290'	3	10 003	18 318	22 700	388.08	16 869	117.730	1456.00	1.900	21.000	148.300
3/31/81	15:29:23	-15 10 260'	75 36 290'	3	10 273	18 326	22 002	382.88	16 641	121.170	1456.00	2.000	20.100	145.300
3/31/81	15:44:23	-15 10 260'	75 36 290'	3	10 304	18 677	22 008	384.64	16 447	117.490	1456.00	2.000	20.100	144.300
3/31/81	15:59:23	-15 10 260'	75 36 290'	3	9 707	17 610	3 660	112.88	16 055	46.117	1456.00	2.100	5.100	180.700
3/31/81	16:14:23	-15 10 320'	75 32 644'	2	9 457	17 340	2 036	166.93	15 741	45.620	1610.00	2.000	3.900	214.400
3/31/81	16:29:23	-15 10 320'	75 32 644'	2	9 410	17 601	3 464	145.52	15 485	46.029	1610.00	2.100	5.200	205.200
3/31/81	16:44:23	-15 10 320'	75 32 644'	2	9 781	17 941	4 602	121.57	15 087	64.549	1610.00	2.100	6.500	207.100
3/31/81	16:59:23	-15 10 320'	75 32 644'	2	9 332	18 453	25 689	310.19	14 995	240.260	1610.00	2.000	24.500	187.300
3/31/81	17:14:23	-15 10 320'	75 32 644'	2	10 567	18 278	21 131	312.03	15 341	249.990	1610.00	10.700	16.000	172.400
3/31/81	17:29:23	-15 10 320'	75 32 644'	2	11 529	19 040	24 808	314.74	15 774	251.230	1610.00	10.700	18.700	183.100
3/31/81	17:44:23	-15 10 320'	75 32 644'	2	11 995	19 441	22 968	314.76	16 200	254.660	1610.00	10.700	17.400	182.800
3/31/81	17:59:23	-15 10 320'	75 32 644'	2	095	18 289	20 277	302.01	16 995	261.480	1610.00	10.700	17.100	172.100
3/31/81	18:14:23	-15 10 320'	75 32 644'	2	12 668	20 025	6 993	163.15	17 584	83.056	1610.00	10.700	17.400	257.800
3/31/81	18:29:23	-15 10 320'	75 32 644'	2	11 701	19 281	4 167	122.18	17 175	76.115	1610.00	10.700	13.100	241.400
3/31/81	18:44:23	-15 10 320'	75 32 644'	2	12 654	19 441	4 813	120.79	17 758	81.127	1610.00	10.700	14.400	243.600
3/31/81	18:59:23	-15 10 320'	75 32 644'	2	12 444	19 774	5 829	142.15	17 703	80.450	1610.00	10.700	10.600	140.400
3/31/81	19:14:23	-15 10 320'	75 32 644'	2	12 795	19 580	22 909	157.41	17 698	332.050	1610.00	10.700	15.500	248.300
3/31/81	19:29:23	-15 10 320'	75 32 644'	2	12 570	19 580	22 909	157.41	17 681	63.206	1928.00	10.700	16.400	217.500
3/31/81	19:44:23	-15 8 229'	75 39 304'	2	12 806	19 580	3 331	123.32	17 643	74.286	1928.00	10.700	13.000	240.800
3/31/81	19:59:23	-15 8 229'	75 39 304'	2	12 294	19 940	7 257	304.76	17 590	252.990	1928.00	10.700	8.900	115.100
3/31/81	20:14:23	-15 8 229'	75 39 304'	2	12 592	19 583	4 722	125.76	17 550	66.987	1928.00	10.800	22.300	210.400
3/31/81	20:29:23	-15 8 229'	75 39 304'	2	12 455	19 400	6 040	124.99	17 509	70.120	1928.00	10.700	15.300	230.500
3/31/81	20:44:23	-15 8 229'	75 39 304'	2	12 922	19 400	13 980	126.08	17 565	61.653	1928.00	10.800	22.300	210.400
3/31/81	20:59:23	-15 8 229'	75 39 304'	2	12 440	19 400	5 183	139.54	17 464	74.220	1928.00	10.700	14.900	241.000
3/31/81	21:14:23	-15 7 343'	75 38 984'	2	12 222	19 336	5 171	133.85	17 349	59.705	2114.00	10.700	14.400	225.100
3/31/81	21:29:23	-15 7 343'	75 38 984'	2	12 169	19 226	4 609	118.32	17 252	55.605	2114.00	10.700	13.800	217.900
3/31/81	21:44:23	-15 7 343'	75 38 984'	2	12 011	19 065	7 768	133.54	17 180	64.202	2114.00	10.800	16.900	224.200
3/31/81	21:59:23	-15 7 343'	75 38 984'	2	11 836	19 261	27 203	350.35	17 125	149.040	2114.00	1.900	25.400	138.400
3/31/81	22:14:23	-15 7 343'	75 38 984'	2	11 848	19 400	27 938	364.52	17 089	141.190	2114.00	1.800	26.000	145.900
3/31/81	22:29:23	-15 6 329'	75 38 477'	3	11 535	19 220	27 316	364.73	17 105	137.760	2226.00	1.800	25.900	142.800
3/31/81	22:44:23	-15 6 329'	75 38 477'	3	11 333	18 863	28 787	364.72	17 052	139.530	2226.00	1.900	26.700	144.700
3/31/81	23:14:23	-15 6 329'	75 38 477'	3	11 411	18 680	30 349	364.99	17 000	139.610	2226.00	2.200	28.200	144.600
3/31/81	23:29:23	-15 6 329'	75 38 477'	3	11 232	18 509	29 610	360.52	16 955	143.870	2226.00	2.100	27.600	144.700
3/31/81	23:44:23	-15 6 329'	75 38 477'	3	11 032	18 500	30 505	361.49	16 932	140.560	2226.00	2.100	28.300	142.200
3/31/81	23:59:25	-15 6 329'	75 38 477'	3	10 889	18 500	31 770	348.30	16 922	160.670	2226.00	2.100	28.000	142.000
3/31/81	0:14:25	-15 6 329'	75 38 477'	3	10 089	18 500	31 770	348.30	16 922	160.670	2226.00	2.100	28.000	142.000

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEMPOIN	AIRTEMP	APPROWSP	APPRDNR	SEATEMP	GYROMED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
4/ 1/81	0:29:25	-15 9.011'	75 35.915'	2	10.668	18.300	29.978	349.13	16.938	160.260	10.00	2.200	27.600	148.600
4/ 1/81	0:44:25	-15 9.011'	75 35.915'	2	10.666	18.437	28.344	348.79	16.998	159.210	10.00	3.100	25.000	146.500
4/ 1/81	0:59:25	-15 9.920'	75 35.999'	2	10.666	18.320	29.665	348.02	17.021	161.410	28.00	3.100	26.600	148.100
4/ 1/81	1:14:25	-15 9.920'	75 35.999'	2	10.262	18.207	29.701	373.75	17.042	122.650	28.00	1.700	26.500	137.800
4/ 1/81	1:29:25	-15 9.920'	75 35.999'	2	9.778	18.140	29.312	381.59	17.048	118.600	28.00	1.700	27.600	141.300
4/ 1/81	1:44:25	-15 9.920'	75 35.999'	2	9.777	17.984	29.349	380.78	16.999	119.550	28.00	1.700	27.700	141.600
4/ 1/81	1:59:25	-15 9.920'	75 35.999'	2	9.781	17.960	28.067	379.28	16.965	120.260	28.00	1.700	26.300	140.600
4/ 1/81	2:14:25	-15 12.797'	75 33.759'	2	9.860	17.780	27.886	373.30	16.844	121.440	150.00	1.900	24.700	136.300
4/ 1/81	2:29:25	-15 12.797'	75 33.759'	2	9.808	17.780	27.886	373.30	16.844	121.440	150.00	1.900	26.000	135.700
4/ 1/81	2:44:25	-15 13.088'	75 33.041'	3	9.778	17.772	26.609	370.48	16.772	120.320	210.00	1.800	24.800	134.600
4/ 1/81	2:59:25	-15 13.088'	75 33.041'	3	9.777	17.600	26.872	372.13	16.689	120.350	210.00	1.800	25.300	132.800
4/ 1/81	3:14:25	-15 13.088'	75 33.041'	3	9.696	17.420	25.093	371.83	16.596	122.380	210.00	1.900	23.100	135.000
4/ 1/81	3:29:25	-15 13.088'	75 33.041'	3	9.555	17.420	24.964	376.77	16.503	120.340	210.00	1.900	23.000	138.800
4/ 1/81	3:44:25	-15 13.088'	75 33.041'	3	9.555	17.240	23.635	371.76	16.409	123.670	210.00	1.800	21.900	136.500
4/ 1/81	3:59:25	-15 14.272'	75 30.399'	4	9.804	17.198	19.407	367.06	16.385	123.910	336.00	1.800	17.500	132.000
4/ 1/81	4:14:25	-15 14.272'	75 30.399'	4	9.999	17.240	16.661	364.80	16.388	124.920	336.00	1.800	15.200	130.300
4/ 1/81	4:29:25	-15 14.272'	75 30.399'	4	10.003	17.240	18.797	366.07	16.282	121.620	336.00	2.200	16.600	128.700
4/ 1/81	4:44:25	-15 14.272'	75 30.399'	4	9.979	17.127	19.374	367.26	15.979	120.810	336.00	2.200	17.000	129.300
4/ 1/81	4:59:25	-15 14.272'	75 30.399'	4	9.566	17.060	19.499	365.95	15.874	121.800	336.00	2.200	17.200	128.400
4/ 1/81	5:14:25	-15 14.272'	75 30.399'	4	9.474	17.060	19.894	364.71	15.670	121.040	336.00	2.200	17.600	126.300
4/ 1/81	5:29:25	-15 14.272'	75 30.399'	4	9.551	17.060	18.703	348.95	15.442	145.980	336.00	1.200	17.500	134.100
4/ 1/81	5:44:25	-15 14.272'	75 30.399'	4	9.637	17.067	21.219	346.27	15.272	161.060	336.00	1.200	20.000	146.400
4/ 1/81	5:59:25	-15 16.137'	75 27.019'	2	9.555	17.076	21.089	340.73	15.251	157.150	532.00	1.200	19.900	137.300
4/ 1/81	6:14:25	-15 16.137'	75 27.019'	2	9.555	17.060	21.360	335.76	15.348	158.640	532.00	1.200	20.400	133.300
4/ 1/81	6:29:25	-15 16.137'	75 27.019'	2	9.554	17.060	20.674	335.52	15.434	158.660	532.00	3.100	18.000	129.500
4/ 1/81	6:44:25	-15 16.137'	75 27.019'	2	9.637	17.240	20.383	336.92	15.474	157.480	532.00	3.100	17.600	130.100
4/ 1/81	6:59:25	-15 16.137'	75 27.019'	2	9.999	17.420	18.233	693.89	15.851	156.540	532.00	3.600	15.400	125.700
4/ 1/81	7:14:25	-15 21.160'	75 25.263'	2	10.439	17.549	18.095	332.19	16.264	157.750	656.00	3.600	14.800	127.500
4/ 1/81	7:29:25	-15 21.160'	75 25.263'	2	10.856	17.780	17.978	335.00	16.667	158.460	656.00	3.600	11.500	126.200
4/ 1/81	7:44:25	-15 21.160'	75 25.263'	2	11.080	17.960	14.778	336.57	17.690	156.400	656.00	3.600	11.500	126.200
4/ 1/81	7:59:25	-15 21.160'	75 25.263'	2	11.115	18.140	14.293	331.61	17.897	157.970	656.00	3.600	11.100	122.000
4/ 1/81	8:14:25	-15 21.160'	75 25.263'	2	11.637	18.320	15.119	662.73	18.199	157.970	656.00	3.600	13.700	84.400
4/ 1/81	8:29:25	-15 21.160'	75 25.263'	2	11.777	18.320	15.972	340.19	18.375	144.330	656.00	3.600	12.500	119.000
4/ 1/81	8:44:25	-15 21.160'	75 25.263'	2	11.858	18.500	14.739	341.75	18.632	145.090	656.00	3.600	11.500	121.200
4/ 1/81	8:59:25	-15 21.160'	75 25.263'	2	12.139	18.502	15.320	338.28	18.610	146.200	656.00	3.600	12.300	118.400
4/ 1/81	9:14:25	-15 27.044'	75 23.622'	4	11.812	18.523	16.027	658.19	18.633	143.710	840.00	3.600	14.800	65.400
4/ 1/81	9:29:25	-15 27.044'	75 23.622'	4	11.999	18.500	14.915	584.17	18.617	144.920	840.00	3.600	17.800	349.700
4/ 1/81	9:44:25	-15 27.044'	75 23.622'	4	12.442	18.680	14.117	510.81	18.746	145.030	840.00	3.600	18.100	318.900
4/ 1/81	9:59:25	-15 27.044'	75 23.622'	4	12.297	18.678	15.646	673.91	18.896	145.610	840.00	3.600	13.300	85.100
4/ 1/81	10:14:25	-15 30.810'	75 21.109'	4	12.222	18.567	13.021	596.06	18.983	145.610	950.00	3.600	15.700	1.300
4/ 1/81	10:29:25	-15 30.810'	75 21.109'	4	11.719	18.500	4.704	396.32	19.036	316.980	950.00	3.600	2.900	37.000
4/ 1/81	10:44:25	-15 30.810'	75 21.109'	4	11.364	18.143	6.727	398.01	18.831	317.850	950.00	3.600	4.300	26.200
4/ 1/81	10:59:25	-15 30.810'	75 21.109'	4	11.174	18.098	2.456	400.38	18.632	317.880	950.00	11.000	9.100	126.800
4/ 1/81	11:14:27	-15 30.810'	75 21.109'	4	11.032	17.960	1.637	404.75	17.929	317.070	950.00	10.900	9.700	129.800
4/ 1/81	11:29:27	-15 30.810'	75 21.109'	4	10.666	17.601	1.857	471.90	17.431	317.170	950.00	10.900	11.700	128.400
4/ 1/81	11:44:29	-15 30.810'	75 21.109'	4	10.443	17.418	2.976	466.99	17.169	323.880	950.00	10.900	11.900	131.200
4/ 1/81	11:59:29	-15 21.498'	75 30.831'	3	10.244	17.534	1.261	470.02	16.991	322.970	1138.00	10.900	11.300	136.900
4/ 1/81	12:14:29	-15 21.498'	75 30.831'	3	11.109	18.310	1.201	475.41	16.903	323.590	1138.00	10.900	11.500	137.800
4/ 1/81	12:29:29	-15 21.498'	75 30.831'	3	11.695	18.986	3.999	271.72	16.861	324.810	1138.00	11.000	10.500	166.300
4/ 1/81	12:44:29	-15 21.498'	75 30.831'	3	11.747	19.103	5.272	144.21	16.886	323.580	1138.00	10.900	15.200	132.800
4/ 1/81	12:59:29	-15 21.498'	75 30.831'	3	11.910	19.041	6.036	156.35	16.890	322.000	1138.00	10.900	19.400	130.200
4/ 1/81	13:14:29	-15 21.498'	75 30.831'	3	10.677	18.860	6.299	265.48	16.917	249.090	1138.00	10.900	13.000	99.800
4/ 1/81	13:29:29	-15 21.498'	75 30.831'	3	11.362	18.503	9.553	134.77	16.931	89.287	1138.00	10.900	18.600	239.400

C NOW ON STATION #6 ZODIAKS AND BIMS OVER THE SIDE

4/ 1/81	13:44:31	-15 21.498'	75 30.831'	3	10.666	18.143	4.519	122.98	16.848	64.785	1138.00	10.900	14.500	228.900
4/ 1/81	13:59:31	-15 8.533'	75 39.955'	2	10.663	17.960	4.431	134.64	16.829	62.965	1336.00	11.000	15.200	229.400
4/ 1/81	14:14:31	-15 8.533'	75 39.955'	2	9.567	17.494	6.597	130.65	16.798	64.131	1336.00	11.000	15.900	227.000
4/ 1/81	14:29:31	-15 8.533'	75 39.955'	2	10.666	17.786	6.570	129.34	16.796	70.981	1336.00	800	6.600	205.600

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPRUSP	APPRNDR	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
4/ 1/81	14: 44: 31	-15 8 533'	75 39 935'	2	10 666	17 943	2 790	126 52	16 769	82 805	1336 00	800	3 400	218 200
4/ 1/81	14: 59: 31	-15 8 533'	75 39 955'	2	11 099	18 074	4 630	130 87	16 792	82 885	1336 00	800	5 600	218 800
4/ 1/81	15: 14: 31	-15 8 533'	75 39 955'	2	10 919	18 679	6 527	299 40	16 727	82 810	1336 00	800	5 900	204 500
4/ 1/81	15: 29: 31	-15 8 533'	75 39 935'	2	11 678	19 329	18 789	321 17	16 761	240 290	1336 00	800	17 500	200 100
4/ 1/81	15: 44: 31	-15 8 533'	75 39 635'	4	11 964	19 044	7 821	127 54	16 944	65 716	1520 00	800	8 700	199 300
4/ 1/81	15: 59: 31	-15 7 872'	75 39 635'	4	11 333	18 680	5 628	130 51	17 028	77 590	1520 00	800	6 000	212 800
4/ 1/81	16: 14: 31	-15 7 872'	75 39 635'	4	11 333	18 680	6 214	122 86	17 018	77 281	1520 00	800	7 200	200 900
4/ 1/81	16: 29: 31	-15 7 872'	75 39 635'	4	11 229	19 258	16 771	303 60	16 995	214 420	1520 00	800	16 800	156 500
4/ 1/81	16: 44: 31	-15 7 872'	75 39 635'	4	11 111	19 693	7 445	282 93	17 061	255 430	1520 00	800	7 300	174 700
4/ 1/81	16: 59: 31	-15 7 872'	75 39 635'	4	10 858	20 130	6 586	311 93	17 061	255 430	1520 00	800	6 400	193 000
4/ 1/81	17: 14: 31	-15 7 872'	75 39 635'	4	10 666	19 949	7 888	296 33	17 084	253 000	1520 00	800	6 900	174 600
4/ 1/81	17: 29: 31	-15 7 872'	75 39 635'	4	10 666	19 949	7 888	310 15	17 107	254 310	1520 00	800	6 200	205 000
4/ 1/81	17: 44: 31	-15 7 683'	75 40 764'	3	11 321	19 904	9 679	128 93	17 111	58 831	1714 00	800	10 000	194 300
4/ 1/81	17: 59: 31	-15 7 683'	75 40 764'	3	10 900	19 581	2 695	113 95	17 103	66 920	1714 00	800	4 300	205 100
4/ 1/81	18: 14: 31	-15 7 683'	75 40 764'	3	9 931	18 870	5 150	119 56	17 069	77 621	1714 00	800	5 400	200 200
4/ 1/81	18: 29: 31	-15 7 683'	75 40 764'	3	10 069	18 572	6 037	123 44	17 047	78 122	1714 00	800	5 900	210 400
4/ 1/81	18: 44: 31	-15 7 683'	75 40 764'	3	10 474	19 093	4 626	124 61	16 989	70 648	1714 00	700	4 700	201 700
4/ 1/81	18: 59: 31	-15 7 399'	75 40 732'	5	10 729	19 204	5 628	135 07	16 954	79 103	1842 00	800	5 100	221 700
4/ 1/81	19: 14: 31	-15 7 399'	75 40 732'	5	10 677	19 219	5 611	173 53	16 933	74 975	1842 00	800	6 700	210 300
4/ 1/81	19: 29: 31	-15 7 399'	75 40 732'	5	11 491	20 300	25 502	637 49	16 990	213 530	1842 00	800	25 300	154 400
4/ 1/81	19: 44: 31	-15 7 399'	75 40 732'	5	11 553	19 771	4 194	135 69	17 255	69 131	1842 00	800	4 500	202 300
4/ 1/81	19: 59: 31	-15 7 399'	75 40 732'	5	11 534	19 580	3 991	109 02	17 293	67 704	1842 00	700	4 600	188 800
4/ 1/81	20: 14: 31	-15 7 399'	75 40 732'	5	11 352	19 409	5 232	126 42	17 276	75 790	1842 00	800	5 400	204 200
4/ 1/81	20: 29: 31	-15 7 399'	75 40 732'	5	11 637	19 400	3 986	136 96	17 248	68 728	1842 00	800	5 500	196 900
4/ 1/81	20: 44: 31	-15 7 399'	75 40 732'	5	11 747	19 579	5 687	137 22	17 214	65 141	1842 00	800	7 000	201 300
4/ 1/81	20: 59: 31	-15 7 276'	75 40 519'	3	11 118	19 824	11 896	299 96	17 114	247 440	2028 00	800	11 300	189 700
4/ 1/81	21: 14: 31	-15 7 276'	75 40 519'	3	12 369	19 786	12 718	134 03	17 069	49 591	2028 00	800	15 100	187 700
4/ 1/81	21: 29: 31	-15 7 276'	75 40 519'	3	11 904	19 110	8 760	132 03	16 968	15 087	2028 00	800	9 030	151 300
4/ 1/81	21: 44: 31	-15 7 276'	75 40 519'	3	10 837	19 220	9 180	277 36	16 805	265 730	2028 00	800	9 200	172 400
4/ 1/81	21: 59: 31	-15 4 578'	75 40 891'	3	10 888	19 049	14 096	300 31	16 588	244 080	2136 00	800	13 500	187 600
4/ 1/81	22: 14: 31	-15 4 578'	75 40 891'	3	11 757	20 231	33 363	360 21	16 662	163 060	2136 00	800	32 600	162 500
4/ 1/81	22: 29: 31	-15 4 578'	75 40 891'	3	12 222	20 300	31 843	360 44	16 857	158 330	2136 00	800	31 700	157 100
4/ 1/81	22: 44: 31	-15 4 578'	75 40 891'	3	11 859	19 467	3 754	111 51	17 004	55 082	2136 00	800	5 900	195 100
4/ 1/81	22: 59: 31	-15 4 578'	75 40 891'	3	11 777	19 220	8 251	125 84	16 968	55 063	2136 00	800	8 200	180 800
4/ 1/81	23: 14: 31	-15 4 578'	75 40 891'	3	11 699	19 040	8 558	133 23	16 907	50 110	2136 00	800	10 200	191 700
4/ 1/81	23: 29: 31	-15 4 578'	75 40 891'	3	11 777	18 860	9 038	134 55	16 841	55 404	2136 00	800	8 500	197 200
4/ 1/81	23: 44: 31	-15 7 177'	75 40 357'	3	11 490	19 031	28 613	351 71	16 772	158 960	2322 00	800	27 000	150 900
4/ 1/81	23: 59: 31	-15 7 177'	75 40 357'	3	11 302	19 024	29 047	351 14	16 859	160 680	2322 00	3 300	25 600	150 300
4/ 1/81	0: 14: 31	-15 7 177'	75 40 357'	3	11 411	18 860	27 506	380 19	16 965	143 670	2322 00	3 300	24 900	181 200
4/ 2/81	0: 29: 31	-15 7 177'	75 40 357'	3	11 343	18 525	26 546	358 56	17 078	145 060	2322 00	3 300	23 200	144 700
4/ 2/81	0: 44: 31	-15 7 177'	75 40 357'	3	11 340	18 327	23 286	364 33	17 232	135 030	2322 00	3 300	20 500	140 400
4/ 2/81	0: 59: 31	-15 7 177'	75 40 357'	3	10 888	18 260	23 768	379 52	17 270	135 900	2322 00	2 200	21 300	141 200
4/ 2/81	1: 14: 31	-15 7 177'	75 40 357'	3	10 676	18 189	24 018	362 15	17 287	136 520	2322 00	2 200	22 400	137 400
4/ 2/81	1: 29: 31	-15 9 873'	75 38 309'	3	10 806	18 320	23 554	360 96	17 352	136 950	104 00	2 200	21 300	137 400
4/ 2/81	1: 44: 31	-15 9 873'	75 38 309'	3	10 806	18 146	24 573	361 19	17 387	136 290	104 00	2 200	21 900	137 800
4/ 2/81	1: 59: 31	-15 9 873'	75 38 309'	3	10 503	18 140	24 085	360 09	17 359	136 800	104 00	2 200	21 100	137 300
4/ 2/81	2: 14: 31	-15 9 873'	75 38 309'	3	10 219	18 076	25 369	361 77	17 328	135 940	104 00	2 200	22 500	138 100
4/ 2/81	2: 29: 31	-15 9 873'	75 38 309'	3	10 223	17 960	25 152	359 04	17 266	137 760	104 00	2 200	22 800	136 300
4/ 2/81	2: 44: 31	-15 9 873'	75 38 309'	3	10 231	17 960	25 043	362 17	17 245	136 130	104 00	2 200	22 400	139 800
4/ 2/81	2: 59: 31	-15 12 313'	75 35 392'	3	10 222	17 960	24 719	357 84	17 187	137 020	252 00	2 100	22 300	134 200
4/ 2/81	3: 14: 31	-15 12 313'	75 35 392'	3	10 222	17 846	24 443	358 41	17 152	135 500	252 00	2 200	22 300	133 000
4/ 2/81	3: 29: 31	-15 12 313'	75 35 392'	3	10 274	17 960	23 681	357 07	17 091	137 900	252 00	1 800	21 900	134 600
4/ 2/81	3: 44: 31	-15 12 313'	75 35 392'	3	10 007	17 796	24 234	359 59	17 051	136 650	252 00	1 800	21 800	134 000
4/ 2/81	3: 59: 31	-15 12 313'	75 35 392'	3	10 004	17 957	26 598	337 18	16 977	161 760	252 00	1 800	24 300	138 400
4/ 2/81	4: 14: 31	-15 12 313'	75 35 392'	3	10 218	17 960	24 196	336 16	17 057	161 540	252 00	1 800	22 800	138 800
4/ 2/81	4: 29: 31	-15 12 313'	75 35 392'	3	10 218	17 960	22 864	692 87	17 206	165 190	252 00	3 100	20 400	134 200
4/ 2/81	4: 44: 31	-15 15 594'	75 33 183'	2	9 977	17 952	21 965	337 09	17 357	164 540	436 00	3 100	19 200	144 200
4/ 2/81	4: 59: 31	-15 15 594'	75 33 183'	2	10 000	17 960	21 010	331 46	17 532	163 130	436 00	3 000	18 200	130 500
4/ 2/81	5: 14: 31	-15 15 594'	75 33 183'	2	10 030	17 893	20 278	552 48	17 653	165 720	436 00	3 100	22 500	311 800
4/ 2/81	5: 29: 31	-15 15 594'	75 33 183'	2	10 030	17 893	20 278	552 48	17 653	165 720	436 00	3 100	22 500	311 800

DATE

TIME DEG, MIN-LAT

DEG, MIN-LNG FIX DEWPOINT AIRTEMP

APRWSP

APPRDZ SEATEMP

GYROWED ZULUFIX

MANLSPD TRWDSPD TRWDDIR

4/ 2/81	5:44:36	-15 15.594'	75 33.183'	2	10.160	17.780	19.663	689.03	17.647	164.470	436.00	3.100	16.900	127.000
4/ 2/81	5:59:36	-15 15.594'	75 33.183'	2	10.221	17.600	19.877	348.53	17.573	144.790	436.00	3.000	16.200	131.800
4/ 2/81	6:14:36	-15 15.594'	75 33.183'	2	10.210	17.600	20.714	350.85	17.411	144.940	436.00	3.100	17.800	134.000
4/ 2/81	6:29:37	-15 15.594'	75 33.183'	2	10.195	17.437	19.844	351.02	17.257	144.260	436.00	3.000	16.400	133.700
4/ 2/81	6:44:37	-15 15.594'	75 33.183'	2	10.030	17.352	18.177	346.09	17.197	144.100	436.00	3.700	14.700	128.700
4/ 2/81	6:59:37	-15 15.594'	75 33.183'	2	10.215	17.420	19.260	346.00	17.133	144.910	436.00	3.700	15.800	126.100
4/ 2/81	7:14:37	-15 15.594'	75 33.183'	2	10.222	17.420	18.004	343.60	17.186	143.670	436.00	3.700	14.900	123.200
4/ 2/81	7:29:37	-15 15.594'	75 33.183'	2	10.063	17.420	19.701	341.95	17.135	145.920	436.00	3.700	11.800	114.400
4/ 2/81	7:44:37	-15 15.594'	75 33.183'	2	10.000	17.420	14.739	336.18	17.179	145.620	436.00	3.700	12.000	109.100
4/ 2/81	7:59:37	-15 15.594'	75 33.183'	2	10.222	17.242	15.887	349.82	17.161	122.250	436.00	3.700	11.800	133.700
4/ 2/81	8:14:37	-15 15.594'	75 27.509'	3	10.028	17.105	15.105	361.14	16.969	127.570	750.00	3.700	12.000	119.200
4/ 2/81	8:29:37	-15 25.043'	75 27.509'	3	10.191	17.240	15.358	352.56	16.827	129.490	750.00	3.700	10.500	119.100
4/ 2/81	8:44:37	-15 25.043'	75 27.509'	3	10.202	17.240	13.943	353.82	16.886	128.080	750.00	3.800	8.800	113.400
4/ 2/81	8:59:37	-15 25.043'	75 27.509'	3	10.447	17.420	12.184	350.99	17.194	128.760	750.00	3.800	8.900	117.900
4/ 2/81	9:14:37	-15 25.043'	75 27.509'	3	10.666	17.428	12.877	351.21	17.467	130.810	750.00	3.700	10.900	117.100
4/ 2/81	9:29:37	-15 27.837'	75 23.874'	2	11.249	17.762	12.331	348.83	17.556	131.040	902.00	3.200	8.900	115.400
4/ 2/81	9:44:39	-15 29.343'	75 22.414'	2	11.112	17.780	12.477	347.60	17.670	131.420	938.00	3.300	9.300	111.300
4/ 2/81	10:14:41	-15 29.343'	75 22.414'	2	10.503	17.600	14.157	343.50	17.670	131.420	938.00	3.900	10.500	110.900
4/ 2/81	10:29:41	-15 29.343'	75 22.414'	2	10.081	17.127	1.890	398.65	17.316	328.390	938.00	3.900	2.400	99.600
4/ 2/81	10:44:41	-15 29.343'	75 22.414'	2	9.333	16.880	1.666	451.88	16.847	319.610	938.00	3.900	4.300	118.800
4/ 2/81	10:59:41	-15 29.343'	75 22.414'	3	9.337	16.886	1.549	110.15	16.964	320.450	1046.00	3.900	5.000	115.300
4/ 2/81	11:14:41	-15 26.956'	75 24.111'	3	9.555	16.993	1.859	111.40	16.840	319.270	1046.00	3.900	4.800	117.900
4/ 2/81	11:29:41	-15 26.956'	75 24.111'	3	9.770	17.060	2.234	114.97	17.096	319.090	1046.00	3.900	5.700	112.800
4/ 2/81	11:44:41	-15 26.956'	75 24.111'	3	10.070	17.417	4.366	121.19	17.415	320.050	1046.00	3.900	7.000	109.900
4/ 2/81	11:59:41	-15 26.956'	75 24.111'	3	10.575	17.600	3.730	121.39	17.705	320.850	1046.00	11.400	13.400	128.300
4/ 2/81	12:14:41	-15 26.956'	75 24.111'	3	11.106	18.136	3.927	122.85	17.544	318.910	1046.00	11.500	15.200	121.900
4/ 2/81	12:29:41	-15 26.956'	75 24.111'	3	11.389	18.680	2.331	117.91	17.297	318.830	1046.00	11.400	12.700	129.300
4/ 2/81	12:44:41	-15 26.956'	75 38.502'	3	10.680	18.566	6.295	293.68	17.027	321.320	1240.00	500	5.700	170.800
4/ 2/81	12:59:41	-15 10.284'	75 38.502'	3	10.677	18.558	5.436	282.14	16.929	238.620	1240.00	500	5.800	152.700
4/ 2/81	13:14:41	-15 10.284'	75 38.502'	3	10.636	18.655	19.077	347.25	16.902	131.790	1240.00	500	16.300	96.700
4/ 2/81	13:29:41	-15 10.284'	75 38.502'	3	10.656	18.140	4.506	130.69	16.868	50.705	1240.00	500	5.200	189.000
4/ 2/81	13:44:41	-15 10.284'	75 38.502'	3	11.111	18.163	5.343	125.48	16.882	50.484	1240.00	500	5.200	174.900
4/ 2/81	13:59:41	-15 10.284'	75 38.502'	3	10.612	18.256	6.656	125.18	16.860	49.002	1240.00	500	7.100	180.800
4/ 2/81	14:14:41	-15 10.284'	75 38.502'	3	10.843	18.260	6.847	125.89	16.886	47.643	1240.00	500	7.400	176.000
4/ 2/81	14:29:41	-15 10.284'	75 38.502'	3	11.331	19.031	21.403	327.97	16.890	200.330	1428.00	500	20.900	169.500
4/ 2/81	14:44:41	-15 7.261'	75 40.680'	3	11.524	18.709	6.399	126.23	17.042	50.129	1428.00	500	5.600	179.400
4/ 2/81	14:59:41	-15 7.261'	75 40.680'	3	11.555	18.680	7.308	123.62	17.019	51.121	1428.00	500	6.900	176.200
4/ 2/81	15:14:41	-15 7.261'	75 40.680'	3	11.566	18.722	6.250	123.15	17.015	51.030	1428.00	500	6.300	174.900
4/ 2/81	15:29:41	-15 7.261'	75 40.680'	3	11.777	19.218	9.256	308.07	17.037	240.350	1428.00	500	8.500	184.500
4/ 2/81	15:44:41	-15 7.261'	75 40.680'	3	12.231	19.050	5.220	120.61	17.075	58.873	1428.00	500	6.300	192.400
4/ 2/81	15:59:41	-15 7.261'	75 40.680'	3	12.361	19.040	8.313	124.31	17.070	53.435	1428.00	500	8.700	178.400
4/ 2/81	16:14:41	-15 7.261'	75 40.680'	3	12.410	19.034	6.810	129.50	17.126	57.512	1428.00	500	8.100	191.100
4/ 2/81	16:29:41	-15 6.514'	75 42.270'	3	11.968	19.231	14.103	301.97	17.065	192.320	1620.00	500	17.400	138.800
4/ 2/81	16:44:41	-15 6.514'	75 42.270'	3	11.808	19.400	10.210	299.28	17.093	248.420	1620.00	500	8.800	193.600
4/ 2/81	16:59:41	-15 6.514'	75 42.270'	3	12.051	19.467	6.078	292.46	17.157	259.870	1620.00	500	6.300	184.500
4/ 2/81	17:14:41	-15 6.514'	75 42.270'	3	12.026	19.694	6.282	300.62	17.190	254.710	1620.00	500	18.400	164.400
4/ 2/81	17:29:41	-15 6.514'	75 42.270'	3	11.975	19.693	23.382	338.99	17.145	203.540	1620.00	500	28.000	162.000
4/ 2/81	17:44:41	-15 6.514'	75 42.270'	3	12.660	20.481	28.300	353.80	17.110	169.410	1620.00	500	18.400	164.400
4/ 2/81	17:59:41	-15 6.514'	75 42.270'	3	11.805	19.702	6.556	134.31	17.320	63.937	1620.00	7.000	11.100	221.900
4/ 2/81	18:14:41	-15 6.514'	75 42.270'	3	12.200	19.285	7.285	124.33	17.359	56.768	1620.00	7.000	12.800	209.000
4/ 2/81	18:29:41	-15 6.514'	75 42.270'	3	12.879	19.418	7.904	128.01	17.358	55.208	1620.00	7.000	13.100	209.800
4/ 2/81	18:44:41	-15 6.514'	75 42.270'	3	12.817	19.400	8.519	129.37	17.407	51.737	1620.00	7.000	13.500	203.300
4/ 2/81	18:59:41	-15 6.514'	75 42.270'	3	12.465	19.882	16.501	299.65	17.353	168.080	1620.00	7.000	15.700	108.200
4/ 2/81	19:14:41	-15 6.514'	75 42.270'	3	12.143	19.940	7.400	280.10	17.318	258.080	1620.00	7.000	9.300	126.500
4/ 2/81	19:29:41	-15 6.514'	75 42.270'	3	12.614	19.583	6.549	126.29	17.268	57.743	1620.00	7.000	10.200	215.000
4/ 2/81	19:44:41	-15 6.514'	75 43.144'	3	12.666	19.400	6.398	128.76	17.274	55.887	1936.00	7.000	12.000	210.000
4/ 2/81	19:59:41	-15 6.522'	75 43.144'	3	12.607	19.335	6.080	124.24	17.284	28.421	1936.00	7.000	9.900	168.300
4/ 2/81	20:14:41	-15 6.522'	75 43.144'	3	12.444	19.383	5.806	120.26	17.300	53.521	1936.00	7.000	10.600	210.200
4/ 2/81	20:29:41	-15 6.522'	75 43.144'	3	12.444	19.383	5.806	120.26	17.300	53.521	1936.00	7.000	10.600	210.200

DATE	TIME	DEG, MIN-LAT	DEG, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRUDSPD	TRUDDIR
4/ 2/81	20:44:41	-15 6.522'	75 43.144'	3	12.444	19.286	7.601	127.16	53.059	1936.00	7.000	11.400	205.000
4/ 2/81	20:59:41	-15 6.522'	75 43.144'	3	12.226	19.227	5.261	119.03	53.246	1936.00	7.000	9.700	222.400
4/ 2/81	21:14:41	-15 6.522'	75 43.144'	3	12.433	19.178	8.289	123.29	57.136	1936.00	7.000	13.600	207.600
4/ 2/81	21:29:41	-15 6.522'	75 43.144'	3	12.222	19.220	8.343	127.53	54.397	1936.00	7.000	12.200	204.800
4/ 2/81	21:44:41	-15 4.631'	75 43.829'	3	12.223	19.220	4.530	126.58	57.347	2122.00	7.000	11.000	215.300
4/ 2/81	21:59:41	-15 4.631'	75 43.829'	3	12.522	19.220	9.941	134.76	37.151	2122.00	7.000	14.800	189.400
4/ 2/81	22:14:41	-15 4.631'	75 43.829'	3	12.304	19.289	1.582	232.07	16.714	317.500	7.000	8.300	143.600
4/ 2/81	22:29:41	-15 4.631'	75 43.829'	3	11.557	18.927	11.733	300.77	16.605	237.610	7.000	11.600	141.700
4/ 2/81	22:44:41	-15 4.631'	75 43.829'	3	11.141	18.683	6.642	294.42	16.688	249.590	7.000	7.800	128.100
4/ 2/81	22:59:41	-15 0.925'	75 46.873'	3	11.555	18.860	21.797	360.45	16.682	153.300	7.000	15.200	149.500
4/ 2/81	23:14:41	-15 0.925'	75 46.873'	3	11.138	18.860	21.755	367.64	16.643	139.710	1.800	19.800	148.700
4/ 2/81	23:29:41	-15 0.925'	75 46.873'	3	11.111	18.860	21.560	366.53	16.614	137.960	1.800	19.500	145.600
4/ 2/81	23:44:41	-15 0.925'	75 46.873'	3	10.893	18.860	19.937	365.17	16.629	140.660	1.800	18.500	146.900
4/ 2/81	23:59:41	-15 0.925'	75 46.873'	3	11.111	18.680	21.354	364.08	16.716	138.340	1.800	20.900	171.700
4/ 2/81	0:14:41	-15 2.227'	75 47.441'	3	11.110	18.500	22.678	378.71	16.740	141.370	1.800	20.600	141.600
4/ 3/81	0:29:41	-15 2.227'	75 47.441'	3	10.909	18.501	22.355	373.16	16.754	126.540	1.800	21.100	136.600
4/ 3/81	0:44:41	-15 3.502'	75 46.153'	3	10.446	18.523	23.426	371.58	16.775	123.820	1.800	21.100	136.600
4/ 3/81	0:59:41	-15 3.502'	75 46.153'	3	10.588	18.500	23.967	374.10	16.803	125.200	1.800	22.800	141.200
4/ 3/81	1:14:41	-15 3.502'	75 46.153'	3	10.444	18.387	23.388	374.62	16.735	123.990	1.800	21.900	140.600
4/ 3/81	1:29:41	-15 3.502'	75 46.153'	3	10.443	18.323	22.480	371.92	16.704	126.330	1.800	20.900	140.600
4/ 3/81	1:44:41	-15 3.502'	75 46.153'	3	10.423	18.320	23.910	373.38	16.735	125.830	1.800	21.800	140.200
4/ 3/81	1:59:41	-15 3.502'	75 46.153'	3	10.363	18.272	23.814	358.66	16.714	142.690	1.800	22.300	148.300
4/ 3/81	2:14:41	-15 3.502'	75 46.153'	3	10.673	18.368	24.235	351.89	16.750	158.360	1.800	22.100	149.300
4/ 3/81	2:29:41	-15 4.789'	75 43.718'	3	10.888	18.500	23.790	352.11	16.804	159.360	1.800	21.500	151.200
4/ 3/81	2:44:41	-15 4.789'	75 43.718'	3	11.099	18.500	23.752	353.40	16.949	159.370	3.600	20.800	150.400
4/ 3/81	2:59:41	-15 4.789'	75 43.718'	3	11.322	18.679	23.786	350.98	17.134	160.330	3.600	20.200	149.800
4/ 3/81	3:14:41	-15 4.789'	75 43.718'	3	11.324	18.677	23.144	352.63	17.262	159.410	3.600	18.700	151.300
4/ 3/81	3:29:41	-15 4.789'	75 43.718'	3	11.334	18.673	22.505	348.97	17.488	159.450	3.600	19.300	146.200
4/ 3/81	3:44:41	-15 4.789'	75 43.718'	3	11.555	18.516	21.203	349.57	17.675	159.270	3.600	17.800	143.100
4/ 3/81	3:59:41	-15 4.789'	75 43.718'	3	11.673	18.500	22.367	345.47	17.832	159.720	3.600	18.600	142.800
4/ 3/81	4:14:41	-15 4.789'	75 43.718'	3	11.495	18.500	22.367	348.32	17.925	160.340	3.600	18.700	145.900
4/ 3/81	4:29:41	-15 4.789'	75 43.718'	3	11.333	18.500	20.608	345.91	18.052	159.470	3.600	17.800	143.100
4/ 3/81	4:44:41	-15 4.789'	75 43.718'	3	11.141	18.500	21.197	345.96	18.101	160.110	3.600	18.400	143.000
4/ 3/81	4:59:41	-15 4.789'	75 43.718'	3	11.340	18.500	20.915	344.45	18.172	159.730	3.600	17.600	140.800
4/ 3/81	5:14:41	-15 4.789'	75 43.718'	3	11.333	18.329	20.763	346.77	18.262	160.110	3.600	16.900	142.500
4/ 3/81	5:29:41	-15 4.789'	75 43.718'	3	11.333	18.329	20.763	346.77	18.262	160.110	3.600	16.900	142.500
4/ 3/81	5:44:41	-15 4.789'	75 43.718'	3	11.333	18.321	18.593	345.21	18.309	160.390	3.600	15.500	140.800
4/ 3/81	5:59:41	-15 4.789'	75 43.718'	3	11.332	18.140	18.434	344.84	18.066	159.500	3.600	14.100	135.200
4/ 3/81	6:14:41	-15 15.678'	75 39.339'	3	11.122	18.140	17.405	340.14	17.801	160.090	3.600	13.300	137.300
4/ 3/81	6:29:41	-15 15.678'	75 39.339'	3	11.281	18.140	15.530	338.19	17.719	160.170	3.600	12.400	133.100
4/ 3/81	6:44:41	-15 15.678'	75 39.339'	3	11.333	18.140	15.567	338.57	17.778	159.500	3.600	12.500	132.300
4/ 3/81	6:59:41	-15 15.678'	75 39.339'	3	11.554	18.011	15.274	338.88	17.836	159.440	3.600	11.700	131.400
4/ 3/81	7:14:41	-15 15.678'	75 39.339'	3	11.404	18.140	16.345	343.30	17.905	160.340	3.600	13.100	139.300
4/ 3/81	7:29:41	-15 15.678'	75 39.339'	3	11.695	18.320	17.008	340.43	18.007	160.230	3.600	13.600	135.800
4/ 3/81	7:44:41	-15 20.719'	75 38.875'	3	11.973	18.500	16.504	340.19	18.185	160.270	3.600	13.300	137.300
4/ 3/81	7:59:41	-15 20.719'	75 38.875'	3	12.222	18.679	16.203	340.91	18.406	159.800	3.600	13.200	135.400
4/ 3/81	8:14:41	-15 20.719'	75 38.875'	3	12.362	18.860	16.365	696.26	18.477	160.600	3.600	13.700	128.700
4/ 3/81	8:29:41	-15 20.719'	75 38.875'	3	12.421	19.040	16.545	375.85	18.601	160.180	3.600	15.200	217.000
4/ 3/81	8:44:41	-15 20.719'	75 38.875'	3	12.445	19.262	18.359	588.59	18.889	159.670	3.600	20.000	35.300
4/ 3/81	8:59:41	-15 20.719'	75 38.875'	3	12.658	19.397	17.640	592.70	19.135	160.530	3.600	20.300	327.900
4/ 3/81	9:14:41	-15 26.201'	75 37.498'	4	12.666	20.052	21.295	576.19	19.569	159.910	3.600	19.500	91.100
4/ 3/81	9:29:41	-15 26.201'	75 37.498'	4	12.887	20.293	21.436	635.00	19.781	159.170	3.600	18.100	121.200
4/ 3/81	9:44:41	-15 26.201'	75 37.498'	4	12.896	20.477	22.781	684.74	19.859	161.080	3.600	20.100	108.300
4/ 3/81	9:59:41	-15 26.201'	75 37.498'	4	12.889	20.773	22.312	453.84	20.215	159.940	3.500	19.700	209.200
4/ 3/81	10:14:41	-15 26.201'	75 37.498'	4	13.182	20.797	23.368	335.85	20.677	160.600	3.600	19.700	131.600
4/ 3/81	10:29:41	-15 29.837'	75 37.231'	2	13.113	20.840	24.249	331.41	20.985	159.700	3.500	21.800	127.400
4/ 3/81	10:44:41	-15 29.837'	75 37.231'	2	13.091	20.669	2.902	157.03	21.034	14.671	3.500	5.900	184.100
4/ 3/81	10:59:41	-15 29.837'	75 37.231'	2	11.948	19.291	2.657	178.91	19.859	13.978	3.500	6.400	183.000
4/ 3/81	11:14:41	-15 29.837'	75 37.231'	2	10.903	18.323	2.791	215.40	18.766	14.887	3.500	6.000	215.200
4/ 3/81	11:29:41	-15 29.837'	75 37.231'	2	10.445	17.780	1.560	343.71	18.137	14.978	3.600	3.300	220.000

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AIRTEMP

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DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APRWSP	APPRWSP	SEATEMP	GYROCHD	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
4/ 4/81	2:44:50	-15 8.679'	75 46.664'	3	11.111	18.500	20.076	401.71	18.275	128.880	112.00	2.100	17.800	135.000
4/ 4/81	3:59:50	-15 8.679'	75 46.664'	3	11.111	18.500	19.841	399.58	18.293	127.490	112.00	2.100	18.300	142.900
4/ 4/81	3:14:50	-15 8.679'	75 46.664'	3	10.890	18.620	22.195	361.01	18.313	127.100	112.00	2.100	20.300	136.000
4/ 4/81	3:29:50	-15 8.679'	75 46.664'	3	10.888	18.567	20.811	363.78	18.275	128.020	112.00	2.100	19.300	132.100
4/ 4/81	3:44:50	-15 8.679'	75 46.664'	3	11.083	18.501	21.321	359.63	18.263	130.120	112.00	2.000	20.100	131.300
4/ 4/81	3:59:50	-15 8.679'	75 46.664'	3	10.899	18.500	23.697	358.97	18.262	129.800	112.00	2.000	20.900	130.600
4/ 4/81	4:14:50	-15 8.679'	75 46.664'	3	10.585	18.542	23.885	377.35	18.233	128.120	112.00	2.000	23.000	157.800
4/ 4/81	4:29:50	-15 8.679'	75 46.664'	3	10.444	18.679	25.551	346.07	18.229	150.060	112.00	2.000	23.000	157.800
4/ 4/81	4:44:50	-15 8.679'	75 46.664'	3	10.666	18.680	24.493	346.62	18.231	149.900	112.00	3.600	21.500	134.200
4/ 4/81	4:59:50	-15 12.388'	75 40.563'	3	10.888	18.549	23.164	346.46	18.155	149.600	440.00	3.600	19.900	133.500
4/ 4/81	5:14:50	-15 12.388'	75 40.563'	3	10.666	18.500	23.267	346.67	18.109	149.700	440.00	3.500	19.400	134.300
4/ 4/81	5:29:50	-15 12.388'	75 40.563'	3	10.662	18.500	22.248	347.18	18.163	150.980	440.00	3.600	19.000	135.800
4/ 4/81	5:44:50	-15 12.388'	75 40.563'	3	10.445	18.320	20.712	346.82	18.321	150.030	440.00	3.600	17.000	133.000
4/ 4/81	5:59:50	-15 12.388'	75 40.563'	3	10.666	18.256	21.140	346.31	18.278	150.970	440.00	3.600	17.200	133.800
4/ 4/81	6:14:50	-15 12.388'	75 40.563'	3	10.519	18.140	20.075	346.35	18.273	149.720	440.00	3.600	16.800	133.100
4/ 4/81	6:29:50	-15 17.477'	75 38.318'	4	10.666	18.140	19.738	344.08	18.064	149.650	616.00	3.600	15.800	130.500
4/ 4/81	6:44:50	-15 17.477'	75 38.318'	4	10.665	18.140	19.257	344.03	17.997	150.650	616.00	4.100	15.000	130.900
4/ 4/81	6:59:50	-15 17.477'	75 38.318'	4	10.666	17.976	18.124	343.61	17.914	151.190	616.00	4.100	14.500	131.300
4/ 4/81	7:14:50	-15 17.477'	75 38.318'	4	10.886	17.960	18.939	351.09	17.926	149.770	616.00	4.100	14.500	138.200
4/ 4/81	7:29:50	-15 17.477'	75 38.318'	4	10.914	17.978	18.608	348.98	17.929	150.740	616.00	4.100	14.700	137.300
4/ 4/81	7:44:50	-15 17.477'	75 38.318'	4	11.087	18.140	18.401	348.03	17.890	150.730	616.00	3.900	14.300	134.900
4/ 4/81	7:59:50	-15 17.477'	75 38.318'	4	11.111	18.313	18.305	349.24	17.829	151.050	616.00	3.900	14.500	136.500
4/ 4/81	8:14:50	-15 22.759'	75 35.188'	3	11.551	18.459	18.116	349.74	18.131	150.220	800.00	3.800	14.700	135.800
4/ 4/81	8:29:50	-15 22.759'	75 35.188'	3	12.220	18.860	17.092	347.94	18.501	150.520	800.00	4.100	15.200	133.700
4/ 4/81	8:44:50	-15 22.759'	75 35.188'	3	12.444	19.399	20.127	347.06	19.125	150.620	800.00	4.100	16.000	134.700
4/ 4/81	8:59:50	-15 26.395'	75 33.236'	3	12.612	19.580	19.103	347.60	19.386	149.980	910.00	4.100	16.000	135.400
4/ 4/81	9:14:50	-15 26.395'	75 33.236'	3	12.888	19.873	21.277	349.67	19.516	150.250	910.00	4.100	16.700	137.600
4/ 4/81	9:29:50	-15 26.395'	75 33.236'	3	12.728	20.118	20.647	346.24	19.881	150.230	910.00	4.100	16.600	133.100
4/ 4/81	9:44:50	-15 28.077'	75 32.025'	4	13.049	20.129	2.360	122.60	20.526	343.590	948.00	4.100	19.100	92.000
4/ 4/81	10:14:50	-15 28.077'	75 32.025'	4	12.666	20.233	2.722	538.85	20.327	150.270	948.00	11.100	12.600	153.800
4/ 4/81	10:29:50	-15 28.077'	75 32.025'	4	12.886	19.469	1.761	110.54	19.572	341.710	948.00	11.100	11.600	155.300
4/ 4/81	10:44:50	-15 28.077'	75 32.025'	4	12.087	19.586	1.146	108.97	18.549	343.230	948.00	11.100	11.600	155.800
4/ 4/81	10:59:50	-15 23.508'	75 33.971'	3	11.111	18.320	1.186	80.57	17.947	343.310	1054.00	11.100	10.900	157.100
4/ 4/81	11:14:50	-15 23.508'	75 33.971'	3	11.111	18.024	1.122	77.82	17.736	344.260	1054.00	11.100	10.900	158.500
4/ 4/81	11:29:50	-15 23.508'	75 33.971'	3	10.666	17.960	1.883	77.24	17.907	343.040	1054.00	11.100	10.800	156.000
4/ 4/81	11:44:50	-15 23.508'	75 33.971'	3	10.444	18.140	2.780	127.32	17.895	343.170	1054.00	11.100	12.600	151.700
4/ 4/81	11:59:50	-15 23.508'	75 33.971'	3	11.301	18.670	5.258	202.26	17.736	310.650	1054.00	11.100	15.500	138.000
4/ 4/81	12:14:50	-15 23.508'	75 33.971'	3	11.110	18.705	11.306	293.90	17.592	221.130	1214.00	2.300	10.500	148.700
4/ 4/81	12:29:50	-15 9.353'	75 39.073'	2	10.667	18.705	10.279	286.69	17.547	246.080	1214.00	2.300	7.400	134.700
4/ 4/81	12:44:50	-15 9.353'	75 39.073'	2	10.717	18.680	25.402	352.26	17.655	159.490	1214.00	2.300	23.000	150.800
4/ 4/81	13:14:50	-15 11.030'	75 39.975'	2	11.035	19.024	5.767	311.79	17.785	232.800	1300.00	2.300	6.000	162.600
4/ 4/81	13:29:50	-15 11.030'	75 39.975'	2	11.035	19.082	5.694	165.06	17.843	313.860	1300.00	2.300	8.400	130.800
4/ 4/81	13:44:50	-15 11.030'	75 39.975'	2	11.016	18.683	4.161	131.98	17.800	52.654	1300.00	2.400	5.500	206.400
4/ 4/81	13:59:50	-15 11.030'	75 39.975'	2	10.888	18.614	3.639	128.62	17.768	46.827	1300.00	2.300	5.400	193.600
4/ 4/81	14:14:50	-15 8.951'	75 40.293'	3	10.888	18.502	3.076	125.37	17.764	55.450	1354.00	2.300	5.300	202.100
4/ 4/81	14:29:50	-15 8.951'	75 40.293'	3	10.585	18.497	3.924	125.61	17.760	59.960	1354.00	2.300	4.700	202.700
4/ 4/81	14:44:50	-15 8.951'	75 40.293'	3	10.429	18.491	4.485	126.20	17.734	58.605	1440.00	2.400	6.200	200.400
4/ 4/81	15:14:50	-15 8.182'	75 40.281'	2	10.745	18.500	2.720	127.33	17.752	52.420	1440.00	2.400	4.300	204.500
4/ 4/81	15:29:50	-15 8.182'	75 40.281'	2	10.969	18.503	3.279	144.26	17.753	55.756	1440.00	2.400	4.200	192.200
4/ 4/81	15:44:50	-15 8.182'	75 40.281'	2	11.057	18.869	15.423	144.34	17.697	349.520	1440.00	500	17.000	135.600
4/ 4/81	15:59:50	-15 8.182'	75 40.281'	2	11.057	19.375	6.239	281.02	17.681	245.910	1440.00	500	6.900	172.000
4/ 4/81	16:14:50	-15 8.182'	75 40.281'	2	11.982	19.166	8.819	130.74	17.759	37.732	1440.00	500	9.200	172.200
4/ 4/81	16:29:50	-15 8.182'	75 40.281'	2	11.607	19.154	5.035	128.15	17.773	63.056	1440.00	600	5.000	193.300
4/ 4/81	16:44:50	-15 6.651'	75 41.333'	3	11.318	19.657	25.139	400.40	17.761	140.770	1624.00	500	23.700	146.300
4/ 4/81	16:59:50	-15 6.651'	75 41.333'	3	11.999	20.832	26.037	384.30	17.849	150.550	1624.00	500	25.300	187.700
4/ 4/81	17:14:50	-15 6.651'	75 41.333'	3	11.777	19.385	4.854	132.06	17.982	63.903	1624.00	500	4.900	198.400
4/ 4/81	17:29:50	-15 6.651'	75 41.333'	3	11.988	19.220	5.900	120.73	18.021	59.214	1624.00	500	5.200	180.600

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DWPOINT	AIRTEMP	APRWSP	APPRDUR	SEATEMP	GYROHED	ZULUFIX	MANUSPD	TRUDSPD	TRAUDDR
1/ 4/81	17:44:54	-15 6.651'	75 41.333'	3	12.000	19.220	4.077	121.81	18.013	55.668	1624.00	500	4.300	182.200
1/ 4/81	17:59:54	-15 6.651'	75 41.333'	3	11.808	19.355	3.691	115.25	17.993	53.379	1624.00	500	4.100	176.800
1/ 4/81	18:14:54	-15 6.651'	75 41.333'	3	11.978	19.220	5.419	130.34	17.926	52.714	1624.00	500	5.800	185.700
1/ 4/81	18:29:54	-15 6.651'	75 41.333'	3	11.649	19.337	4.264	141.16	17.893	59.362	1624.00	500	3.500	198.500
1/ 4/81	18:44:54	-15 6.651'	75 41.333'	3	11.777	19.382	4.392	138.71	17.888	61.044	1624.00	500	4.300	199.500
1/ 4/81	18:59:54	-15 6.651'	75 41.333'	3	11.648	19.988	8.969	300.55	17.792	239.190	1624.00	500	8.900	179.600
1/ 4/81	19:14:56	-15 6.651'	75 41.333'	3	12.210	19.590	7.999	135.96	17.772	50.572	1624.00	500	8.000	181.500
1/ 4/81	19:29:56	-15 6.651'	75 41.333'	3	11.999	19.400	5.897	123.63	17.776	51.364	1624.00	500	7.500	182.500
1/ 4/81	19:44:56	-15 6.651'	75 41.333'	3	11.777	19.393	4.132	126.70	17.794	57.742	1624.00	500	4.200	195.200
1/ 4/81	19:59:57	-15 6.651'	75 41.333'	3	11.449	19.357	4.416	153.25	17.738	77.075	1624.00	500	4.400	257.100
1/ 4/81	20:14:57	-15 5.117'	75 40.988'	3	12.133	20.760	31.223	373.00	17.612	160.580	1944.00	500	30.700	182.900
1/ 4/81	20:29:57	-15 5.117'	75 40.988'	3	12.434	20.051	4.851	165.20	17.770	80.687	1944.00	500	5.000	228.800
1/ 4/81	20:44:58	-15 5.117'	75 40.988'	3	12.207	20.159	4.274	147.92	17.869	85.218	1944.00	500	6.400	246.200
1/ 4/81	20:59:58	-15 5.117'	75 40.988'	3	12.170	19.647	3.647	119.24	17.884	69.761	1944.00	500	3.400	197.000
1/ 4/81	21:14:58	-15 7.775'	75 39.058'	4	12.222	19.580	7.110	141.32	17.804	45.173	2056.00	500	5.700	168.400
1/ 4/81	21:29:58	-15 7.775'	75 39.058'	4	12.657	20.297	9.62	155.23	17.667	329.820	2056.00	500	900	137.000
1/ 4/81	21:44:58	-15 7.775'	75 39.058'	4	12.222	19.941	10.707	298.87	17.603	280.930	2056.00	500	9.900	220.000
1/ 4/81	21:59:58	-15 5.370'	75 40.939'	3	11.808	19.603	6.337	260.63	17.548	261.160	2130.00	500	5.800	161.100
1/ 4/81	22:14:58	-15 5.370'	75 40.939'	3	11.777	19.409	6.525	280.58	17.567	252.960	2130.00	500	6.200	165.200
1/ 4/81	22:29:58	-15 5.370'	75 40.939'	3	13.093	19.238	12.420	137.38	17.522	25.320	2130.00	500	13.400	166.000
1/ 4/81	22:44:58	-15 5.370'	75 40.939'	3	12.000	19.107	6.056	123.43	17.524	48.293	2130.00	500	6.500	176.100
1/ 4/81	22:59:58	-15 5.370'	75 40.939'	3	11.929	19.040	6.060	132.66	17.490	47.944	2130.00	500	6.200	186.100
1/ 4/81	23:14:58	-15 5.370'	75 40.939'	3	11.998	18.973	7.744	127.19	17.510	48.941	2130.00	500	7.100	177.700
1/ 4/81	23:29:58	-15 5.370'	75 40.939'	3	11.998	18.860	6.785	127.00	17.484	48.941	2130.00	600	7.700	104.200
1/ 4/81	23:44:58	-15 5.370'	75 40.939'	3	11.969	18.860	6.966	130.38	17.406	44.975	2130.00	600	7.800	178.800
1/ 4/81	23:59:58	-15 5.370'	75 40.939'	3	11.777	18.854	7.331	132.54	17.304	43.494	2130.00	500	16.200	99.100
1/ 4/81	0:14:58	-15 5.370'	75 40.939'	3	10.806	18.683	18.593	364.31	17.242	106.200	2130.00	500	22.600	142.900
1/ 4/81	0:29:58	-15 5.370'	75 40.939'	3	10.744	18.835	23.496	382.20	17.231	119.700	2130.00	4.100	21.700	139.200
1/ 4/81	0:44:58	-15 2.118'	75 44.310'	3	10.471	18.680	22.429	390.53	17.349	109.820	30.00	4.200	20.500	137.800
1/ 4/81	0:59:58	-15 2.118'	75 44.310'	3	10.666	18.680	25.760	385.24	17.291	110.020	30.00	4.100	18.400	146.400
1/ 4/81	1:14:58	-15 2.118'	75 44.310'	3	10.666	18.680	24.222	381.56	17.209	110.860	30.00	4.200	20.500	137.800
1/ 4/81	1:29:58	-15 2.251'	75 41.704'	3	9.103	18.323	22.720	373.39	16.974	125.380	110.00	4.100	18.400	154.100
1/ 4/81	1:44:58	-15 2.251'	75 41.704'	3	10.697	18.500	22.333	353.47	16.845	170.130	110.00	3.800	19.600	161.900
1/ 4/81	1:59:58	-15 2.251'	75 41.704'	3	11.106	18.680	22.235	346.94	16.907	170.510	110.00	3.800	18.200	155.000
1/ 4/81	2:14:58	-15 2.251'	75 41.704'	3	11.110	18.678	21.618	344.72	17.351	170.850	110.00	3.700	18.100	152.600
1/ 4/81	2:29:58	-15 4.884'	75 40.152'	3	10.940	18.680	21.720	344.93	17.478	167.380	208.00	3.800	18.900	148.100
1/ 4/81	2:44:58	-15 4.884'	75 40.152'	3	10.890	18.680	22.341	343.14	17.472	169.870	208.00	3.700	19.000	149.300
1/ 4/81	2:59:58	-15 4.884'	75 40.152'	3	11.119	18.844	22.698	342.12	17.624	169.870	208.00	3.700	17.600	151.000
1/ 4/81	3:14:58	-15 4.884'	75 40.152'	3	11.352	18.860	20.740	345.02	17.847	168.970	208.00	3.800	18.800	147.400
1/ 4/81	3:29:58	-15 4.884'	75 40.152'	3	11.251	18.860	21.674	341.79	17.935	169.410	208.00	3.700	17.300	145.800
1/ 4/81	3:44:58	-15 4.884'	75 40.152'	3	11.331	18.860	20.812	340.95	18.065	169.200	208.00	3.800	17.200	146.100
1/ 4/81	3:59:58	-15 4.884'	75 40.152'	3	11.323	18.858	20.798	342.07	18.220	169.060	208.00	3.700	16.500	145.100
1/ 4/81	4:14:58	-15 11.111'	75 39.492'	4	11.325	18.680	20.144	339.93	18.290	169.410	348.00	4.000	17.200	139.800
1/ 4/81	4:29:58	-15 11.111'	75 39.492'	4	11.111	18.680	20.443	336.21	18.247	169.200	348.00	4.000	24.100	1.700
1/ 4/81	4:44:58	-15 11.111'	75 39.492'	4	11.112	18.680	20.145	588.79	18.227	169.020	348.00	4.000	15.200	138.000
1/ 4/81	4:59:58	-15 11.111'	75 39.492'	4	11.281	18.680	19.163	694.53	18.317	169.590	348.00	4.000	15.200	145.200
1/ 4/81	5:14:58	-15 11.111'	75 39.492'	4	11.333	18.680	18.656	700.26	18.398	169.460	348.00	4.000	15.100	145.900
1/ 4/81	5:29:58	-15 11.111'	75 39.492'	4	11.333	18.680	19.268	700.58	18.474	170.970	348.00	4.000	13.400	145.000
1/ 4/81	5:44:58	-15 11.111'	75 39.492'	4	11.553	18.680	17.645	699.56	18.358	170.010	348.00	4.000	18.600	46.900
1/ 4/81	5:59:58	-15 18.175'	75 38.455'	3	11.756	18.859	17.405	593.37	18.306	170.280	536.00	4.000	21.100	20.600
1/ 4/81	6:14:58	-15 18.175'	75 38.455'	3	11.747	19.038	18.145	492.67	18.515	169.830	536.00	4.000	21.700	348.800
1/ 4/81	6:29:58	-15 18.175'	75 38.455'	3	11.758	19.040	18.014	492.67	18.515	169.830	536.00	4.000	23.300	355.700
1/ 4/81	6:44:58	-15 18.175'	75 38.455'	3	11.786	19.211	19.315	525.64	18.677	170.600	536.00	4.000	17.600	40.200
1/ 4/81	6:59:58	-15 18.175'	75 38.455'	3	12.221	19.397	17.524	609.45	18.897	170.870	536.00	4.000	17.600	267.500
1/ 4/81	7:14:58	-15 18.175'	75 38.455'	3	12.444	19.580	17.382	548.50	19.297	169.610	536.00	4.000	17.600	267.500
1/ 4/81	7:29:58	-15 24.221'	75 38.722'	3	13.028	19.931	18.361	587.86	19.759	169.750	710.00	4.000	21.900	2.000
1/ 4/81	7:44:58	-15 24.221'	75 38.722'	3	13.058	20.119	20.020	446.02	20.374	171.060	710.00	4.000	17.300	229.300
1/ 4/81	7:59:58	-15 24.221'	75 38.722'	3	13.251	20.815	20.163	538.48	20.374	171.060	710.00	4.000	22.100	298.000
1/ 4/81	8:14:58	-15 24.221'	75 38.722'	3	13.182	20.875	20.928	554.12	20.863	169.920	710.00	4.000	24.700	9.500
1/ 4/81	8:29:58	-15 24.221'	75 38.722'	3	13.333	21.020	22.463	442.12	21.349	172.490	710.00	4.000	23.200	276.300

DATE	TIME	DEC, MIN-LAT	DEC, MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	SEATEMP	CYROHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
4/ 5/81	8: 44: 58	-15 24 221'	75 38 722'	3	13 333	21 248	22 334	447.61	21.850	172.700	710.00	4.000	24.100 291.600
4/ 5/81	8: 59: 58	-15 24 221'	75 38 722'	3	13 141	21 380	22 008	516.51	22.312	170.530	710.00	4.000	26.700 348.200
4/ 5/81	9: 14: 58	-15 24 221'	75 38 722'	3	13 555	21 568	23 488	475.52	22.787	169.740	710.00	4.000	27.700 333.300
4/ 5/81	9: 29: 58	-15 30 699'	75 38 784'	3	13 529	21 608	23 847	561.92	23.140	170.020	856.00	3.800	26.700 333.500
4/ 5/81	9: 44: 58	-15 30 699'	75 38 784'	3	13 559	21 585	23 771	591.57	23.417	170.190	856.00	3.900	26.900 24.400
4/ 5/81	9: 59: 58	-15 30 699'	75 38 784'	3	13 754	21 739	4 571	148.67	23.474	14.866	856.00	3.900	7.500 180.900
4/ 5/81	10: 14: 58	-15 30 699'	75 38 784'	3	13 777	21 219	5 298	144.29	22.551	15.404	856.00	3.900	9.200 176.800
4/ 5/81	10: 29: 58	-15 31 217'	75 38 660'	3	13 111	20 842	2 806	140.67	21.322	14.667	1004.00	3.900	6.600 182.500
4/ 5/81	10: 44: 58	-15 31 217'	75 38 660'	3	12 448	19 786	2 162	169.80	20.141	15.218	1004.00	3.900	5.700 201.500
4/ 5/81	10: 59: 58	-15 31 217'	75 38 660'	3	11 428	18 873	1 469	187.21	19.299	15.169	1004.00	3.800	4.700 188.300
4/ 5/81	11: 14: 58	-15 31 217'	75 38 660'	3	10 749	18 159	1 721	145.40	18.323	14.411	1004.00	3.800	5.300 176.900
4/ 5/81	11: 29: 58	-15 31 217'	75 38 660'	3	10 241	17 787	3 025	132.18	17.742	15.381	1004.00	3.800	5.600 177.700
4/ 5/81	11: 44: 58	-15 31 217'	75 38 660'	3	10 473	17 781	4 997	132.64	17.736	14.068	1004.00	3.800	7.900 165.800
4/ 5/81	11: 59: 58	-15 31 217'	75 38 660'	3	9 222	17 609	5 379	138.03	17.366	29.731	1004.00	9.100	13.500 193.900
4/ 5/81	12: 14: 58	-15 11 090'	75 33 599'	3	9 552	17 414	6 840	134.98	15.895	29.170	1152.00	9.100	13.300 193.500
4/ 5/81	12: 29: 58	-15 11 090'	75 33 599'	3	8 791	17 271	5 302	376.50	15.523	26.407	1152.00	9.100	14.200 188.500
4/ 5/81	12: 44: 58	-15 11 090'	75 33 599'	3	9 060	17 595	5 415	278.69	15.148	232.300	1152.00	9.100	6.500 242.800
4/ 5/81	12: 59: 58	-15 3 838'	75 29 787'	3	8 971	17 779	5 393	240.95	15.094	267.680	1246.00	9.100	9.600 78.400
4/ 5/81	13: 14: 58	-15 3 838'	75 29 787'	3	9 111	18 156	6 264	256.86	15.081	265.110	1246.00	9.100	12.700 111.300
4/ 5/81	13: 29: 58	-15 3 838'	75 29 787'	3	9 635	17 601	7 922	129.26	15.064	91.579	1246.00	9.100	12.300 114.400
4/ 5/81	13: 44: 58	-15 2 925'	75 30 880'	3	7 623	17 722	7 316	480.33	15.048	55.044	1354.00	9.100	13.300 109.500
4/ 5/81	14: 14: 58	-15 2 925'	75 30 880'	3	8 535	17 183	5 216	490.31	15.023	40.661	1354.00	9.100	13.200 202.100
4/ 5/81	14: 29: 58	-15 2 925'	75 30 880'	3	7 494	17 292	5 578	491.48	15.019	66.793	1354.00	9.100	12.600 228.900
4/ 5/81	14: 44: 58	-15 1 761'	75 31 027'	2	8 911	17 688	16 693	298.48	15.021	131.500	1434.00	9.100	15.600 8.000
4/ 5/81	14: 59: 58	-15 1 761'	75 31 027'	2	8 919	18 117	7 986	301.51	15.028	258.160	1434.00	500	7.500 196.900
4/ 5/81	15: 14: 59	-15 1 761'	75 31 027'	2	9 332	17 630	6 943	132.00	15.051	77.219	1434.00	500	6.800 210.500
4/ 5/81	15: 29: 59	-15 1 761'	75 30 797'	3	9 092	17 127	6 063	132.13	15.067	65.709	1434.00	400	7.100 197.500
4/ 5/81	15: 44: 59	-15 1 294'	75 30 797'	3	9 775	18 187	19 923	312.14	15.079	233.470	1532.00	500	4.700 196.200
4/ 5/81	15: 59: 59	-15 1 294'	75 30 797'	3	9 775	18 187	19 923	312.14	15.079	233.470	1532.00	500	19.900 185.900
4/ 5/81	16: 14: 59	-15 1 294'	75 30 797'	3	9 310	17 611	3 996	128.58	15.484	103.650	1532.00	400	12.200 173.500
4/ 5/81	16: 29: 59	-15 1 294'	75 30 797'	3	9 377	18 403	2 032	220.84	15.467	73.184	1532.00	500	11.100 216.700
4/ 5/81	16: 44: 59	-15 1 294'	75 30 797'	3	9 332	17 240	5 603	130.33	15.436	64.548	1532.00	500	3.100 310.000
4/ 5/81	16: 59: 59	-15 1 294'	75 30 797'	3	9 555	17 241	4 707	129.32	15.410	63.036	1720.00	400	4.300 209.900
4/ 5/81	17: 14: 59	-15 0 922'	75 34 038'	3	9 333	17 240	4 690	127.95	15.379	65.159	1720.00	400	5.200 194.700
4/ 5/81	17: 29: 59	-15 0 922'	75 34 038'	3	9 388	17 773	11 246	285.34	15.252	236.270	1720.00	500	10.600 157.300
4/ 5/81	17: 44: 59	-15 0 922'	75 34 038'	3	9 634	18 184	11 050	302.09	15.301	243.990	1720.00	400	11.800 109.100
4/ 5/81	17: 59: 59	-15 0 922'	75 34 038'	3	9 555	18 028	12 207	306.25	15.390	257.090	1720.00	400	13.000 199.700
4/ 5/81	18: 14: 59	-15 0 922'	75 34 038'	3	9 555	17 978	13 079	303.12	15.548	264.300	1720.00	400	13.300 203.200
4/ 5/81	18: 29: 59	-15 0 922'	75 34 038'	3	9 777	18 140	14 498	302.44	15.602	258.720	1856.00	400	13.700 198.700
4/ 5/81	18: 44: 59	-14 59 400'	75 34 236'	3	10 415	18 150	6 987	126.19	15.601	64.571	1856.00	400	7.600 194.700
4/ 5/81	18: 59: 59	-14 59 400'	75 34 236'	3	9 860	17 603	5 165	129.22	15.647	66.543	1856.00	400	5.600 191.900
4/ 5/81	19: 14: 59	-14 59 400'	75 34 236'	3	9 569	17 420	4 085	122.87	15.628	64.243	1856.00	400	5.000 195.900
4/ 5/81	19: 29: 59	-14 59 400'	75 34 236'	3	9 999	17 600	9 133	126.23	15.612	62.500	1856.00	500	8.400 192.200
4/ 5/81	20: 14: 59	-14 59 400'	75 34 236'	3	10 397	18 432	9 849	318.20	15.574	221.910	1856.00	400	19.500 176.900
4/ 5/81	20: 29: 59	-14 59 400'	75 34 236'	3	9 770	18 321	9 002	292.01	15.537	259.690	1856.00	400	8.900 176.600
4/ 5/81	20: 44: 59	-14 57 664'	75 34 434'	3	10 451	18 500	26 985	579.52	15.585	262.760	2040.00	400	8.700 108.700
4/ 5/81	20: 59: 59	-14 57 664'	75 34 434'	3	10 448	19 014	21 966	380.18	15.945	140.930	2040.00	400	21.500 163.200
4/ 5/81	21: 14: 59	-14 57 664'	75 34 434'	3	10 435	19 399	22 725	377.69	16.033	138.160	2040.00	400	22.300 154.100
4/ 5/81	21: 29: 59	-14 57 664'	75 34 434'	3	10 435	19 399	22 725	377.27	16.067	140.280	2040.00	400	22.000 157.800
4/ 5/81	21: 44: 59	-14 57 664'	75 34 434'	3	10 004	18 927	24 049	378.13	15.975	139.350	2150.00	500	000 000
4/ 5/81	21: 59: 59	-14 59 212'	75 37 202'	3	10 052	18 860	26 598	377.74	15.909	139.780	2150.00	400	26.300 157.200
4/ 5/81	22: 14: 59	-14 59 212'	75 37 202'	3	10 578	18 680	27 568	552.29	15.868	221.860	2150.00	400	29.600 9.600
4/ 5/81	22: 29: 59	-14 59 212'	75 37 202'	3	10 877	18 851	28 009	534.85	16.262	225.190	2150.00	400	28.200 335.900
4/ 5/81	22: 44: 59	-14 59 212'	75 37 202'	3	11 333	19 220	26 251	546.09	17.124	225.030	2150.00	400	27.000 66.900
4/ 5/81	22: 59: 59	-14 59 212'	75 37 202'	3	11 667	19 196	17 446	139.99	17.452	30.757	2150.00	400	14.700 170.800
4/ 5/81	23: 14: 59	-14 59 212'	75 37 202'	3	11 667	19 196	17 446	139.99	17.452	30.757	2150.00	400	14.700 170.800
4/ 5/81	23: 29: 59	-14 59 212'	75 37 202'	3	11 667	19 196	17 446	139.99	17.452	30.757	2150.00	400	14.700 170.800

DATE TIME DEG, MIN-LAT DEG, MIN-LNG FIX DEWPOINT AIRTEMP APPRWSP APPRWDR SEATEMP GYROVED ZULUFIX MANLSPD TRWDSPD TRWDTR

4/ 5/81	23:44:59	-14 59.212'	75 37.202'	3	11.800	19.220	21.099	162.22	17.484	324.160	2150.00	400	21.200	125.500
4/ 5/81	23:59:59	-15 4.463'	75 41.353'	3	11.790	19.046	7.324	123.03	17.524	57.977	2338.00	400	7.800	188.900
4/ 6/81	0:14:59	-15 4.463'	75 41.353'	3	12.316	19.043	12.722	140.64	17.551	49.836	2338.00	400	14.300	189.800
4/ 6/81	0:29:59	-15 4.215'	75 41.394'	2	11.535	19.040	3.587	129.36	17.572	67.581	4.00	400	5.200	201.000
4/ 6/81	0:44:59	-15 4.215'	75 41.394'	2	11.695	18.996	23.358	384.19	17.549	150.380	4.00	2.000	21.600	192.900
4/ 6/81	0:59:59	-15 4.215'	75 41.394'	2	11.337	18.861	23.635	373.82	17.523	149.920	4.00	1.900	21.700	173.300
4/ 6/81	1:14:59	-15 4.215'	75 41.394'	2	11.337	18.860	23.928	340.22	17.441	190.020	4.00	2.000	21.700	171.500
4/ 6/81	1:29:59	-15 4.215'	75 41.394'	2	11.574	19.040	22.549	536.81	17.835	199.690	4.00	2.900	26.300	15.100
4/ 6/81	1:44:59	-15 6.929'	75 40.642'	3	11.566	18.927	19.560	370.26	18.147	124.370	120.00	1.900	17.600	136.700
4/ 6/81	1:59:59	-15 6.929'	75 40.642'	3	11.554	18.860	17.637	395.22	18.224	126.700	120.00	1.900	16.200	134.300
4/ 6/81	2:14:59	-15 9.730'	75 36.813'	7	11.326	18.854	19.418	373.25	18.231	124.050	154.00	2.000	17.100	138.900
4/ 6/81	2:29:59	-15 9.730'	75 36.813'	7	11.111	18.680	19.138	376.09	18.204	122.610	154.00	2.000	17.200	140.000
4/ 6/81	2:44:59	-15 9.730'	75 36.813'	7	11.092	18.680	19.956	373.87	18.240	124.390	154.00	2.000	17.600	140.100
4/ 6/81	2:59:59	-15 9.730'	75 36.813'	7	10.893	18.664	19.710	374.66	18.261	125.890	154.00	2.000	18.200	142.900
4/ 6/81	3:14:59	-15 9.730'	75 36.813'	7	11.111	18.680	20.403	370.53	18.235	124.470	154.00	2.000	18.300	135.300
4/ 6/81	3:29:59	-15 10.305'	75 38.856'	3	11.251	18.838	21.594	366.16	18.231	123.840	310.00	2.000	19.500	129.300
4/ 6/81	3:44:59	-15 10.305'	75 38.856'	3	11.333	18.680	21.686	374.05	18.204	126.650	310.00	2.000	19.900	147.500
4/ 6/81	3:59:59	-15 10.305'	75 38.856'	3	11.111	18.623	20.729	399.04	18.173	124.720	310.00	1.900	18.600	131.600
4/ 6/81	4:14:59	-15 10.305'	75 38.856'	3	10.667	18.500	20.224	367.34	18.149	126.180	310.00	2.000	18.300	134.000
4/ 6/81	4:29:59	-15 10.305'	75 38.856'	3	10.668	18.476	20.439	377.97	18.138	126.310	310.00	1.900	18.500	153.000
4/ 6/81	4:44:59	-15 10.305'	75 38.856'	3	10.677	18.321	21.020	364.74	18.111	125.820	310.00	2.000	19.100	131.000
4/ 6/81	5:00:00	-15 10.305'	75 38.856'	3	10.697	18.384	21.604	364.03	18.050	126.460	310.00	2.000	19.100	131.800
4/ 6/81	5:15:00	-15 11.626'	75 36.826'	3	10.877	18.500	20.605	372.97	17.998	121.930	448.00	2.000	18.500	141.400
4/ 6/81	5:30:00	-15 11.626'	75 36.826'	3	10.610	18.320	19.732	371.58	17.906	115.380	448.00	2.000	17.900	126.900
4/ 6/81	5:45:00	-15 11.626'	75 36.826'	3	10.444	18.302	18.745	372.12	17.842	113.770	448.00	2.000	16.600	128.300
4/ 6/81	6:00:00	-15 11.626'	75 36.826'	3	10.444	18.320	19.797	373.70	17.767	116.010	448.00	2.000	17.600	129.600
4/ 6/81	6:15:00	-15 11.626'	75 36.826'	3	10.666	18.320	21.100	350.35	17.220	159.330	622.00	4.200	17.000	147.100
4/ 6/81	6:30:00	-15 11.626'	75 36.826'	3	10.222	18.320	23.513	375.47	17.629	115.420	448.00	2.000	21.600	132.300
4/ 6/81	6:45:00	-15 12.987'	75 33.832'	2	10.193	18.297	22.513	351.10	17.463	152.800	622.00	4.100	18.700	144.800
4/ 6/81	7:00:00	-15 12.987'	75 33.832'	2	10.654	18.320	21.785	347.60	17.307	159.710	622.00	4.200	17.500	144.400
4/ 6/81	7:15:00	-15 12.987'	75 33.832'	2	10.645	18.320	20.933	351.74	17.316	159.590	622.00	4.200	16.300	149.100
4/ 6/81	7:30:00	-15 12.987'	75 33.832'	2	10.666	18.320	19.993	352.66	17.163	159.640	622.00	4.100	16.000	150.100
4/ 6/81	7:45:00	-15 12.987'	75 33.832'	2	10.888	18.492	19.567	351.13	17.367	159.060	622.00	4.100	15.600	147.800
4/ 6/81	8:00:00	-15 12.987'	75 33.832'	2	11.111	18.500	20.050	347.64	17.609	160.030	622.00	4.100	15.800	144.300
4/ 6/81	8:15:00	-15 18.836'	75 30.747'	3	11.333	18.657	20.104	349.78	17.757	159.620	806.00	4.200	15.800	146.300
4/ 6/81	8:30:00	-15 18.836'	75 30.747'	3	11.411	18.660	19.009	349.48	17.965	159.520	806.00	4.200	15.000	146.100
4/ 6/81	8:45:00	-15 18.836'	75 30.747'	3	11.411	18.660	17.087	342.78	18.133	159.430	806.00	4.200	13.000	135.300
4/ 6/81	9:00:00	-15 18.836'	75 30.747'	3	11.695	18.908	15.068	338.60	18.445	160.430	806.00	4.100	11.200	132.800
4/ 6/81	9:15:00	-15 18.836'	75 30.747'	3	11.992	19.040	14.902	432.90	18.690	160.440	806.00	4.200	17.900	295.200
4/ 6/81	9:30:00	-15 23.343'	75 29.463'	2	12.444	19.562	14.621	701.86	19.576	158.830	916.00	4.200	10.700	133.800
4/ 6/81	10:00:00	-15 23.343'	75 29.463'	2	12.888	19.940	15.161	691.17	20.543	159.280	956.00	4.200	11.800	111.100
4/ 6/81	10:15:00	-15 25.902'	75 28.776'	2	13.109	20.120	15.796	345.39	21.048	160.320	956.00	4.000	12.400	139.700
4/ 6/81	10:30:00	-15 25.902'	75 28.776'	2	13.081	20.473	16.550	346.88	21.585	159.200	956.00	4.100	13.000	140.700
4/ 6/81	10:45:00	-15 25.902'	75 28.776'	2	13.142	20.594	18.378	508.79	21.963	160.250	956.00	4.000	15.900	219.500
4/ 6/81	11:00:00	-15 30.192'	75 27.710'	3	13.333	20.815	19.904	700.18	22.353	160.580	1102.00	4.100	16.600	136.900
4/ 6/81	11:15:00	-15 30.192'	75 27.710'	3	13.343	20.862	20.983	341.05	22.484	160.670	1102.00	4.000	17.500	140.100
4/ 6/81	11:30:00	-15 30.192'	75 27.710'	3	13.997	21.178	1.422	279.70	22.886	286.470	1102.00	4.100	3.800	126.600
4/ 6/81	11:45:00	-15 30.192'	75 27.710'	3	14.139	21.485	763	235.23	23.260	286.040	1102.00	4.000	4.600	115.000
4/ 6/81	12:00:00	-15 30.192'	75 27.710'	3	14.218	21.573	949	232.19	23.315	286.420	1102.00	4.000	4.600	115.400
4/ 6/81	12:15:00	-15 30.192'	75 27.710'	3	14.001	22.063	1.818	646.06	23.220	284.800	1102.00	11.300	10.700	116.000
4/ 6/81	12:30:00	-15 30.192'	75 27.710'	3	14.222	22.472	1.867	285.92	23.077	285.570	1102.00	11.300	10.300	118.000
4/ 6/81	12:45:00	-15 30.192'	75 27.710'	3	14.255	22.460	3.353	323.41	22.828	285.790	1102.00	11.300	9.200	121.700
4/ 6/81	13:00:00	-15 30.192'	75 43.127'	3	14.445	22.825	3.688	344.61	22.839	285.710	1306.00	11.300	7.100	110.100
4/ 6/81	13:15:00	-15 28.523'	75 46.975'	3	14.655	22.817	3.994	307.08	22.695	285.880	1324.00	11.300	8.800	129.400
4/ 6/81	13:30:00	-15 27.683'	75 46.975'	3	14.475	22.821	3.597	278.30	22.556	261.560	1324.00	11.300	11.500	79.100
4/ 6/81	13:45:00	-15 27.683'	75 46.975'	3	14.000	22.460	8.180	332.14	22.477	300.250	1324.00	11.400	13.400	81.000
4/ 6/81	14:00:00	-15 27.683'	75 46.975'	3	14.297	22.167	2.936	125.18	22.424	43.419	1324.00	11.300	13.300	218.400

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	SEATEMP	CYROHED	ZULUFIX	MANLSPD	TRWDSPD	TRWDIR
4/ 6/81	14: 45: 5	-15 27.683'	75 46.975'	3	14.706	22.103	3.332	135.09	22.382	49.409	1324.00	11.300	13.900 219.100
4/ 6/81	15: 0: 5	-15 25.899'	75 54.454'	3	14.185	22.151	4.597	130.43	22.350	40.967	1440.00	11.300	15.000 207.800
4/ 6/81	15: 15: 5	-15 25.878'	75 54.663'	3	14.665	22.409	5.848	129.87	22.292	45.139	1458.00	11.300	15.200 209.300
4/ 6/81	15: 30: 5	-15 26.097'	75 55.199'	2	14.668	22.938	4.342	286.58	22.267	44.030	1514.00	11.300	10.800 85.000
4/ 6/81	15: 45: 5	-15 26.097'	75 55.199'	2	15.239	23.326	17.704	468.71	22.219	221.260	1514.00	11.300	17.400 331.500
4/ 6/81	16: 0: 5	-15 26.097'	75 55.199'	2	15.422	22.541	6.401	136.25	22.329	24.435	1514.00	11.300	16.300 190.000
4/ 6/81	16: 15: 5	-15 26.097'	75 55.199'	2	14.666	22.804	8.810	308.14	22.215	234.310	1514.00	11.300	8.700 109.100
4/ 6/81	16: 30: 5	-15 26.097'	75 55.199'	2	15.334	22.575	3.571	114.50	22.118	44.832	1514.00	11.300	13.800 210.700
4/ 6/81	16: 45: 5	-15 26.097'	75 55.199'	2	15.029	22.481	2.371	133.60	22.043	60.931	1514.00	11.300	12.700 233.700
4/ 6/81	17: 0: 5	-15 25.505'	75 58.041'	3	14.919	22.289	2.703	123.84	21.875	53.525	1626.00	11.400	12.900 224.300
4/ 6/81	17: 15: 5	-15 25.505'	75 58.041'	3	15.205	22.643	18.042	148.95	21.718	176.240	1626.00	11.300	28.600 338.900
4/ 6/81	17: 30: 5	-15 25.505'	75 58.041'	3	14.899	22.280	3.879	155.94	21.655	57.438	1626.00	11.300	14.600 227.900
4/ 6/81	17: 45: 5	-15 25.505'	75 58.041'	3	14.828	22.287	2.600	151.68	21.632	58.127	1626.00	11.300	14.200 230.700
4/ 6/81	18: 0: 5	-15 25.505'	75 58.041'	3	14.264	22.933	5.115	534.40	21.612	250.970	1626.00	11.300	14.500 49.700
4/ 6/81	18: 15: 5	-15 25.505'	75 58.041'	3	3.818	21.935	22.409	345.43	21.630	170.460	1626.00	3.800	19.100 152.500
4/ 6/81	18: 30: 5	-15 25.505'	75 58.041'	3	9.741	23.292	22.966	371.30	22.098	130.430	1626.00	3.800	18.800 142.400
4/ 6/81	18: 45: 5	-15 25.505'	75 58.041'	3	14.864	24.553	22.982	368.83	22.404	130.410	1626.00	3.700	19.300 141.000
4/ 6/81	19: 0: 5	-15 25.505'	75 58.041'	3	14.272	23.799	21.141	346.50	22.738	167.670	1626.00	3.800	17.400 150.900
4/ 6/81	19: 15: 5	-15 25.505'	75 58.041'	3	14.887	23.607	21.246	340.75	23.042	170.200	1626.00	3.700	17.400 146.400
4/ 6/81	19: 30: 5	-15 25.505'	75 58.041'	3	14.366	23.403	22.319	345.62	23.387	169.900	1626.00	3.800	17.900 152.400
4/ 6/81	19: 45: 5	-15 25.505'	75 58.041'	3	13.009	23.539	23.106	705.06	23.573	170.540	1626.00	3.800	19.000 152.900
4/ 6/81	20: 0: 5	-15 25.505'	75 58.041'	3	14.063	23.857	22.159	705.88	23.681	170.990	1626.00	3.700	18.300 153.900
4/ 6/81	20: 15: 5	-15 30.501'	75 59.126'	3	13.949	23.189	23.008	701.43	23.689	171.440	1952.00	3.800	19.100 150.100
4/ 6/81	20: 30: 5	-15 30.501'	75 59.126'	3	13.850	23.178	22.082	706.58	23.700	170.260	1952.00	3.800	19.200 153.800
4/ 6/81	20: 45: 5	-15 30.501'	75 59.126'	3	13.988	23.293	22.063	703.40	23.671	171.000	1952.00	3.800	18.600 150.300
4/ 6/81	21: 0: 5	-15 30.501'	75 59.126'	3	14.188	23.711	21.811	700.18	23.640	170.870	1952.00	3.800	17.800 147.700
4/ 6/81	21: 15: 5	-15 30.501'	75 59.126'	3	14.159	23.909	22.221	704.14	23.535	169.850	1952.00	3.700	18.600 148.000
4/ 6/81	21: 30: 5	-15 35.002'	75 58.933'	3	14.004	23.745	22.571	706.26	23.590	169.660	2102.00	4.000	18.400 153.100
4/ 6/81	21: 45: 5	-15 35.002'	75 58.933'	3	14.222	23.726	21.192	707.65	23.566	169.440	2140.00	4.000	17.400 152.700
4/ 6/81	22: 0: 5	-15 37.934'	75 58.725'	3	13.975	23.385	22.850	704.16	23.651	168.990	2140.00	4.000	18.600 149.000
4/ 6/81	22: 15: 5	-15 37.934'	75 58.725'	3	13.975	23.385	22.850	704.16	23.651	168.990	2140.00	4.100	18.800 154.100
4/ 6/81	22: 30: 5	-15 37.934'	75 58.725'	3	13.727	23.067	22.182	707.05	23.636	169.580	2140.00	4.100	18.800 154.100
4/ 6/81	22: 45: 5	-15 37.934'	75 58.725'	3	13.787	22.821	22.020	709.39	23.552	169.410	2140.00	4.100	18.900 157.200

C STEERING FOR ATMOSPHERIC SAMPLES STARTED AT 18:00Z

4/ 6/81	23: 0: 6	-15 37.934'	75 58.725'	3	13.522	22.527	23.000	713.84	23.535	169.050	2140.00	4.100	18.900 161.500
4/ 6/81	23: 15: 8	-15 41.816'	75 58.248'	3	13.502	22.462	20.537	355.40	23.534	169.140	2246.00	4.000	16.500 163.400
4/ 6/81	23: 30: 10	-15 41.816'	75 58.248'	3	13.212	22.418	21.340	349.74	23.477	169.510	2246.00	4.100	17.300 156.800
4/ 6/81	23: 45: 12	-15 41.816'	75 58.248'	3	13.251	22.302	18.485	350.04	23.415	169.790	2246.00	4.100	14.400 157.000
4/ 6/81	0: 0: 14	-15 41.816'	75 58.248'	3	13.462	22.182	22.977	707.19	23.387	170.080	2246.00	4.100	19.000 154.500
4/ 7/81	0: 15: 16	-15 41.816'	75 58.248'	3	13.552	22.346	22.549	706.32	23.324	170.710	2246.00	4.100	18.500 154.000
4/ 7/81	0: 30: 18	-15 41.816'	75 58.248'	3	13.251	22.280	22.679	349.32	23.286	170.220	2246.00	4.100	18.600 157.200
4/ 7/81	0: 45: 20	-15 41.816'	75 58.248'	3	13.111	22.298	23.378	706.69	23.284	170.190	2246.00	4.000	19.500 154.100
4/ 7/81	1: 0: 22	-15 48.710'	75 56.901'	3	13.059	22.436	21.138	702.05	23.262	171.310	40.00	4.100	17.200 149.100
4/ 7/81	1: 15: 24	-15 48.710'	75 56.901'	3	12.837	22.296	19.838	700.88	23.255	169.510	40.00	4.100	16.000 145.500
4/ 7/81	1: 30: 26	-15 48.710'	75 56.901'	3	13.140	22.281	18.816	332.32	23.231	170.590	40.00	1.100	17.800 141.200
4/ 7/81	1: 45: 28	-15 48.710'	75 56.901'	3	12.961	22.412	18.893	613.21	23.242	170.370	40.00	1.100	19.300 262.400
4/ 7/81	2: 0: 30	-15 48.710'	75 56.901'	3	13.102	22.299	19.350	447.84	23.223	171.340	40.00	1.100	19.300 262.400
4/ 7/81	2: 15: 32	-15 48.710'	75 56.901'	3	12.889	22.394	17.944	418.99	23.225	171.570	40.00	1.100	17.400 233.600
4/ 7/81	2: 30: 34	-15 48.710'	75 56.901'	3	12.691	22.280	19.314	526.03	23.253	172.770	216.00	1.100	20.600 339.000
4/ 7/81	2: 45: 36	-15 50.967'	75 57.041'	3	13.120	22.280	19.314	526.03	23.253	172.770	216.00	1.100	20.000 41.100
4/ 7/81	3: 0: 38	-15 50.967'	75 57.041'	3	12.677	22.250	20.376	348.43	23.256	152.030	216.00	1.100	19.200 139.800
4/ 7/81	3: 15: 40	-15 50.967'	75 57.041'	3	13.031	22.282	20.873	355.75	23.253	148.350	216.00	1.200	19.600 143.800
4/ 7/81	3: 30: 42	-15 50.967'	75 57.041'	3	13.194	21.971	20.617	400.13	23.250	132.950	216.00	1.100	19.700 175.000
4/ 7/81	3: 45: 44	-15 50.967'	75 57.041'	3	13.194	22.094	19.579	370.40	23.253	133.740	216.00	1.100	18.400 144.700
4/ 7/81	4: 0: 46	-15 50.967'	75 57.041'	3	13.137	22.061	24.373	407.11	23.253	115.970	216.00	1.100	23.600 165.000
4/ 7/81	4: 15: 48	-15 51.780'	75 57.594'	5	12.979	21.920	24.527	377.74	23.253	113.820	352.00	1.100	23.400 132.300
4/ 7/81	4: 30: 50	-15 51.780'	75 57.594'	5	12.878	21.935	24.527	375.23	23.226	116.630	352.00	1.100	20.800 132.600
4/ 7/81	4: 45: 52	-15 51.780'	75 57.594'	5	12.679	21.912	20.910	375.01	23.229	112.100	352.00	1.100	19.800 127.900

DATE	TIME	DEG. MIN-LAT	DEG. MIN-LNG	FIX	DEWPOINT	AIRTEMP	APPROX	APPROX	SEATEMP	CYNOCHD	ZULUFIX	MANUSPD	TRWDSPD	TRWDIR
4/ 7/81	5: 0:54	-15 51.780'	75 57.594'	5	12.914	21.968	18.521	421.62	23.222	127.130	352.00	1.100	18.000	191.800
4/ 7/81	5:15:56	-15 51.780'	75 57.594'	5	12.907	22.100	20.657	368.34	23.222	120.750	352.00	1.100	19.500	129.500
4/ 7/81	5:30:58	-15 51.780'	75 57.594'	5	13.191	21.886	20.515	365.37	23.222	123.360	352.00	1.100	19.400	129.000
4/ 7/81	5:46:0	-15 51.780'	75 57.594'	5	13.141	21.920	20.316	383.27	23.242	100.860	352.00	1.100	19.300	125.400
4/ 7/81	6: 1: 2	-15 51.780'	75 57.594'	5	12.889	21.759	20.336	386.73	23.223	101.610	352.00	1.100	19.300	129.800
4/ 7/81	6:16:4	-15 51.780'	75 57.594'	5	13.333	21.741	21.030	386.16	23.222	122.650	352.00	1.100	20.000	150.100
4/ 7/81	6:31:6	-15 51.780'	75 57.594'	5	13.329	21.748	20.190	368.20	23.222	126.220	352.00	1.100	19.100	134.800
4/ 7/81	6:46:8	-15 51.780'	75 57.594'	5	13.112	21.782	21.204	369.43	23.242	122.320	352.00	1.100	20.100	132.200
4/ 7/81	7: 1:10	-15 51.780'	75 57.594'	5	13.333	21.875	20.586	377.87	23.279	113.710	352.00	1.100	19.500	132.500
4/ 7/81	7:16:12	-15 51.780'	75 57.594'	5	14.044	21.923	3.279	137.53	23.282	17.903	352.00	1.100	4.000	172.100
4/ 7/81	7:31:14	-15 51.780'	75 57.594'	5	14.251	21.936	3.073	145.26	23.247	17.942	352.00	1.100	4.000	172.100
4/ 7/81	7:46:16	-15 49.300'	75 53.974'	4	14.149	21.809	2.913	136.16	23.223	19.359	720.00	1.100	3.800	171.000
4/ 7/81	8: 1:18	-15 49.300'	75 53.974'	4	14.139	21.936	2.912	141.46	23.219	19.329	720.00	1.100	3.300	167.600
4/ 7/81	8:16:20	-15 49.300'	75 53.974'	4	14.080	22.058	2.499	136.60	23.354	18.099	720.00	1.100	3.700	167.600
4/ 7/81	8:31:22	-15 49.300'	75 53.974'	4	13.765	21.900	3.264	144.81	23.377	19.116	720.00	1.100	4.200	172.500
4/ 7/81	8:46:24	-15 49.300'	75 53.974'	4	13.635	22.286	2.442	169.13	23.527	19.334	720.00	1.100	3.500	191.800
4/ 7/81	9: 1:26	-15 49.300'	75 53.974'	4	13.776	22.232	1.946	141.17	23.546	18.858	720.00	1.100	2.800	173.800
4/ 7/81	9:16:28	-15 49.300'	75 53.974'	4	13.776	22.232	1.932	159.93	23.525	18.375	720.00	1.100	2.900	185.500
4/ 7/81	9:31:30	-15 29.602'	75 47.960'	3	13.775	21.953	1.925	203.96	23.187	16.297	906.00	1.100	2.900	211.500
4/ 7/81	9:46:32	-15 29.602'	75 47.960'	3	13.788	21.560	1.677	170.18	22.097	17.754	906.00	1.100	2.700	191.800
4/ 7/81	10: 1:34	-15 29.602'	75 47.960'	3	12.982	20.686	1.641	119.47	20.680	17.734	906.00	1.100	2.300	160.900
4/ 7/81	10:16:36	-15 29.602'	75 47.960'	3	12.304	19.949	1.321	125.44	19.464	17.559	906.00	1.100	2.100	167.500
4/ 7/81	10:31:38	-15 17.732'	75 45.374'	3	11.798	19.467	1.460	115.26	19.113	27.553	1012.00	1.100	2.100	170.000
4/ 7/81	10:46:39	-15 17.732'	75 45.374'	3	11.415	19.220	2.220	203.09	19.071	32.014	1012.00	1.100	3.600	224.100
4/ 7/81	11: 1:40	-15 17.732'	75 45.374'	3	11.555	19.065	11.751	259.33	18.685	31.145	1012.00	1.100	6.900	178.000
4/ 7/81	11:16:40	-15 17.732'	75 45.374'	3	11.266	18.851	13.000	318.57	18.285	155.130	1012.00	1.000	13.100	127.700
4/ 7/81	11:31:40	-15 17.732'	75 45.374'	3	12.094	18.860	6.745	128.38	18.194	38.162	1012.00	1.100	7.600	172.200
4/ 7/81	11:46:40	-15 17.732'	75 45.374'	3	11.552	18.818	4.148	132.13	18.200	43.456	1012.00	1.100	4.100	187.500
4/ 7/81	12: 1:40	-15 17.732'	75 45.374'	3	12.134	19.216	.587	19.82	17.969	322.320	1012.00	1.100	.500	115.000
4/ 7/81	12:16:40	-15 17.732'	75 45.374'	3	11.781	19.510	1.176	144.90	17.887	321.040	1012.00	1.100	2.700	118.400
4/ 7/81	12:31:40	-15 5.424'	75 41.894'	4	12.304	20.306	2.349	193.76	17.699	321.020	1202.00	1.100	3.000	174.100
4/ 7/81	12:46:40	-15 3.022'	75 43.860'	2	11.789	19.941	1.905	3.14	17.207	321.430	1218.00	1.000	1.500	330.400
4/ 7/81	13: 1:40	-15 3.022'	75 43.860'	2	11.333	19.401	.651	468.07	16.772	319.760	1218.00	1.100	1.600	115.600
4/ 7/81	13:16:40	-15 3.022'	75 43.860'	2	10.678	19.224	8.665	394.58	16.526	320.160	1218.00	1.100	7.400	327.600
4/ 7/81	13:31:40	-15 3.022'	75 43.860'	2	9.794	19.065	9.262	392.63	16.182	320.410	1218.00	1.100	8.200	357.000
4/ 7/81	13:46:40	-15 3.022'	75 43.860'	2	9.555	18.516	2.244	484.16	16.212	320.260	1218.00	11.300	12.300	133.000
4/ 7/81	14: 1:40	-15 3.022'	75 43.860'	2	10.004	18.654	2.734	476.85	16.310	319.860	1218.00	11.300	12.700	129.800
4/ 7/81	14:16:40	-15 3.022'	75 43.860'	2	10.800	18.144	8.257	490.32	16.340	320.450	1218.00	11.300	18.000	120.400
4/ 7/81	14:31:40	-15 3.022'	75 43.860'	2	10.975	19.417	4.283	491.83	16.518	320.290	1218.00	11.300	14.200	127.900
4/ 7/81	14:46:40	-15 3.022'	75 43.860'	2	11.181	19.069	7.253	496.34	16.496	320.630	1218.00	11.300	16.700	124.900
4/ 7/81	15: 1:42	-15 3.022'	75 43.860'	2	10.445	19.194	5.633	489.92	16.335	319.960	1218.00	11.300	15.500	123.500
4/ 7/81	15:16:42	-15 3.022'	75 43.860'	2	11.322	21.664	.475	290.23	16.090	319.750	1218.00	11.200	11.000	142.000

C SEAREX PROG. COMPLETED ALL SYSTEMS DOWN STEAMING FOR CALAO, PERU

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16. Abstract (Limit: 200 words) In March and April of 1981 a major cruise was undertaken on the R/V Atlantis II off the Peruvian coast near 15°S in order to investigate the sea-air exchange of selected heavy metals and natural anthropogenic organic compounds. The purpose of this report is to collate the hydrographic, nutrient, and plankton data generated from various investigators on this cruise and to provide a standard of reference for the cruise participants. Data for temperature, salinity, oxygen, nitrate, nitrite, ammonium, phosphate, silicate, chlorophyll <u>a</u> , particulate organic carbon, and particulate organic nitrogen are given. In addition, air and sea temperatures, and windspeed and direction data, collected using the SAIL system, are included.			
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